APPENDIX J: ARCHAEOLOGIC STUDY

Public Archaeology Laboratory

EDP Skunk Hill Road Solar
Hope Valley, Rhode Island

Due Diligence Report

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Submitted to:

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Energy Development Partners (EDP) is planning to construct a solar array in Hope Valley, Rhode Island, referred to as Skunk Hill Road Solar Project (Project). The Project may require permits or other approvals from state and/or federal agencies, and consultation with the Rhode Island Historical Preservation & Heritage Commission (RIHPHC). The Project is still being developed but proposed within two lots, totaling 157.6 acres.

This report present's PAL's due diligence review conducted to provide EDP with information about known historic properties and archaeological sites; and to assess the potential (low, moderate, high) for unrecorded archaeological sites to be present within the Project area.

Project Setting

The proposed Project is located in the northwestern portion of Washington County, 3.8 miles east of the Connecticut-Rhode Island state line. The northern boundary is co-located with Skunk Hill Road and Fairview Avenue is 225 meters (m) south. A tributary to Wood River is within the eastern portion and associated wetlands are 150 m north. An unnamed stream associated with Dawley Swamp is 625 m west and Locustville Pond is less than 600 m southwest of the Project area. The peak of Skunk Hill is 0.5 miles northeast and Goad Rock is 185 m south. The Project area is mostly wooded, save for agricultural fields that define the northern and northeastern portions. Topography is undulating, and elevations range from 123 feet (ft) above mean sea level (AMSL) to 201 ft AMSL, the highest in the northwestern portion and the lowest in the eastern portion of the Project area.

Soils within the southern half of the Project consist of well-drained Canton-Charlton-Rock outcrop complex, with lesser amounts of poorly-drained Ridgebury, Leicester, and Whitman soils, extremely stony and excessively drained Hinkley loamy sand (USDA 2018). The northern half consists of moderately well-drained Woodbridge fine sandy loam, poorly-drained Ridgebury, Leicester, and Whitman soils, well-drained Enfield silt loam, and moderately well-drained Tisbury silt loam (USDA 2018). Small amounts of very poorly drained Scarboro mucky fine sandy loam are within the eastern limits of the Project area (USDA 2018).

Areas of Potential Effect (APE)

The Project's Area of Potential Effects (APE) is defined as the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist." A historic property is defined as "any prehistoric or historic district, site, building,

structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (National Register) maintained by the Secretary of the Interior" (36 CFR § 800.16(l)). The APE is defined based on the *potential* for effect, which may differ for aboveground resources (historic structures and landscapes) and subsurface resources (archaeological sites).

The APE for archaeological sites is defined as any areas of ground disturbances that may occur as a result of implementing planned improvements, including construction, access roads, and staging areas. The APE for historic architectural properties includes the construction area and areas adjacent to the project where visual impacts may occur.

Results

PAL conducted a review of archaeological site files maintained by the RIHPHC to identify previously recorded properties within the study area. The file review included both archaeological sites and historic architectural properties that are listed or evaluated as eligible for listing in the State or National Registers and surveyed properties that have not been evaluated for registration. Cultural resource management (CRM) reports, town histories, and historic maps salient to the study area were also consulted.

The archaeological sensitivity of a project area is defined by favorable environmental conditions and the presence of known archaeological sites in similar environmental settings. Well-drained soils near freshwater resources were preferred locations for Native American groups. The key to archaeological sensitivity is the combination of known sites, environmental factors, and the degree to which previous ground disturbances and land modifications (cutting, filling, grading, erosion, previous construction, etc.) have affected subsurface integrity (Table 1).

The study area contains three historic cemeteries, all of which date to the nineteenth century (Figure 1). No previously recorded archaeological sites or historic properties are within the Project area. However, the proposed Project is located within an area of favorable environmental conditions and there is no evidence of ground disturbance.

Recommendations

The proposed Project is located within an area of favorable environmental conditions for historic resources, including archaeological sites. No evidence of ground disturbance from a review of historic aerials and maps although two structures are visible within the project area by 1953 (Beers 1870; RIGIS 2015; Stevens 1831; USGS 1894; 1953). Therefore, the EDP Skunk Hill Road Solar Project area has the potential to contain unrecorded archaeological sites and aboveground historical resources.

Table 1. Archaeological Sensitivity Ranking.

Presence of Sites		Proximity to Favorable Cultural/ Environmental Characteristics			Degree of Disturbance			Sensitivity Ranking
Known	Unknown	< 150 m	≥ 150 ≤ 500 m	> 500 m	None/Minimal	Moderate	Extensive	
•		•			•			High
•		•				•		High
•		•					•	Low
•			•		•			High
•			•			•		High
•			•				•	Low
•				•	•			High
•				•		•		High
•				•			•	Low
	•	•			•			High
	•	•				•		Moderate
	•	•					•	Low
	•		•		•			Moderate
	•		•			•		Moderate
	•		•				•	Low
	•			•	•			Moderate
	•			•		•		Low
	•			•			•	Low

References

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1870 *Atlas of the State of Rhode Island and Providence Plantations.* D. G. Beers and Company, Philadelphia, PA.

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2018 *Natural Resources Conservation Service Web Soil Survey: Washington County, Rhode Island.* Electronic document, http://websoilsurvey.nrcs.usda.gov/app, accessed 2018.

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1893 *Kent, Rhode Island Topographic Quadrangle Maps.,* 7.5-minute series. Washington, D.C.

1953 *Hope Valley, Rhode Island Topographic Quadrangle Maps.,* 7.5-minute series. Washington, D.C.

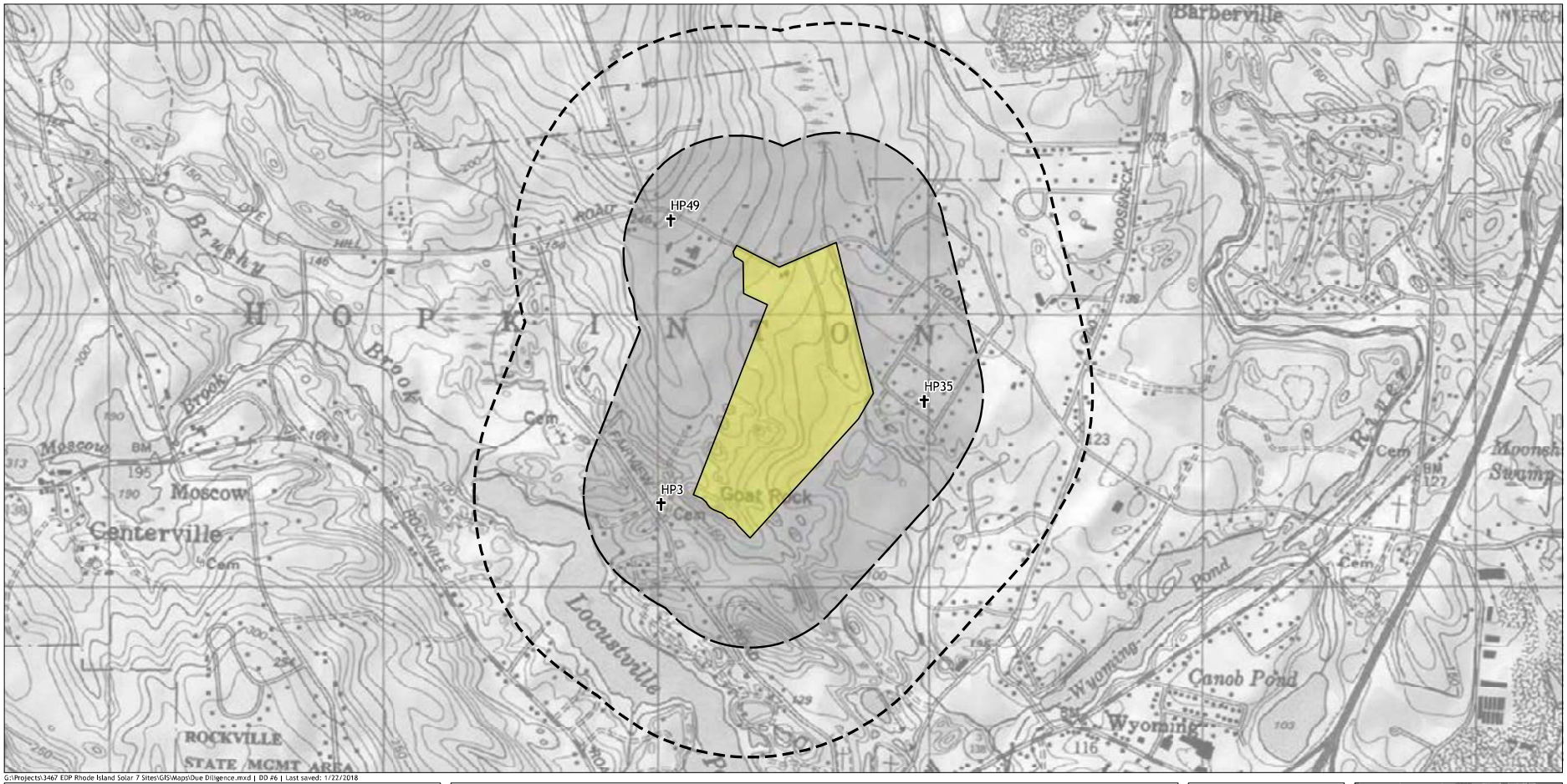

Figure 1. Recorded archaeological sites within 0.5 mile and inventoried historic aboveground resources and cemeteries within 0.25 mile of the Skunk Hill Property project area on the Hope Valley, RI USGS topographic quadrangle, 7.5-minute series.