



MEMO

DATE: December 20, 2022

TO: Jacob Reed, VELCO

FROM: WSP USA Inc.

SUBJECT: Summary of Findings and Recommendations from Gap Analysis, Archaeological Resource Assessment, Phase IB Archaeology Survey, and Architectural Survey at the VELCO Middlebury Substation

On behalf of Vermont Electric Power Company (VELCO), WSP USA Inc., (WSP), Troy, New York, completed a gap analysis, two Archaeological Resource Assessments (ARAs), a Phase IB Archaeology Survey, and an Architectural Reconnaissance Survey in support of the Middlebury Substation Project (Project) in the Town of Middlebury, Addison County, Vermont. The Middlebury Substation project area (also called the assessment area) consists of a parcel covering 4.51 hectares (11.16 acres) surrounding and including the existing Middlebury Substation.

WSP's gap analysis and ARAs covered the project area, and WSP conducted Phase IB subsurface testing of the 1.28 hectares (3.16 acres) within the project area deemed archaeologically sensitive by the ARA.

Gap Analysis, ARAs, and Phase IB Archaeology Survey

In 2018 Louis Berger (now WSP) conducted an ARA of a 1.44-hectare (3.6-acre) parcel for the Middlebury Substation on behalf of VELCO as part of the TDI Secondary Upgrade project (Louis Berger 2018). The original substation was constructed prior to the enactment of state and federal laws and regulations requiring archaeological survey, but the substation parcel was assessed in 2018 because relay replacement was needed for infrastructure improvements. Louis Berger's field inspection determined that construction activities related to the extant fenced-in substation pad and its access roads had resulted in significant disturbance to much of the parcel and these areas were not sensitive for precontact or historic sites. Two small areas totaling 0.11 hectare (0.27 acre) were recommended as archaeologically sensitive: the northwest corner of the parcel between Quarry Road and the access road, and a ridge crest at the south end of the parcel in use as an agricultural field.

In 2020 WSP completed a gap analysis of a 4.51-hectare (11.16-acre) parcel surrounding and inclusive of the extant substation, which was denoted as the Middlebury Substation assessment area (WSP 2020, 2022). WSP determined that a total area of 0.45 hectare (1.61 acres) was disturbed by the extant substation, associated access roads, and the associated grading and cut-and-fill areas surrounding the pad. An area of 0.21 hectare (0.52 acre) of the parcel was excluded for a stream channel. The gap analysis also determined that 5.00 hectares (11.11 acres) of the assessment area had been previously surveyed for other projects, and these surveyed areas were eliminated as archaeologically sensitive as the Vermont Department of Historic Preservation (VDHP) had concurred with the prior consultant's findings of non-sensitivity. The ARA sensitivity model identified a total of 1.28 hectares (3.16 acres) as archaeologically sensitive for precontact sites in the assessment area, which included the mapped location of Site VT-AD-0463,

a precontact site. Based on the available historical mapping, which showed no development in the assessment area other than construction related to the substation, the Middlebury assessment area was assessed as not historically sensitive. The remaining area of 3.23 hectares (8 acres) was considered to be either non-sensitive or previously assessed and surveyed.

In 2022 WSP completed an ARA of the 4.51-hectare (11.16-acre) expansion parcel surrounding the Middlebury Substation (WSP 2022). The field inspection confirmed the findings of the 2020 gap analysis, and the sensitive areas were determined to be suitable for subsurface testing, with the exception of a dirt and gravel farm road that ran the length of the west Project boundary and spanned 5 meters (16 feet), and a few small dry drainages or road ditches. The remainder of the project area was confirmed as non-sensitive, with the exception of a small copse of mature trees east of the existing substation that was deemed to be potentially sensitive for historic resources.

Following the ARA, WSP conducted subsurface testing in the areas of defined archaeological sensitivity, excavating a total of 159 shovel tests. Soil types were consistent with those predicted for the project area. The Phase IB survey recovered no cultural materials and identified no new precontact or historic archaeological sites (WSP 2022). Site VT-AD-0463 was not relocated despite implementing close-interval testing within its mapped boundaries within the assessment area.

The Robinson et al. (1991) survey that identified Site VT-AD-0463 recorded only one quartz flake in the portion of the site that falls within the current project area. Given the lack of artifacts or diagnostic materials, the absence of intact subsurface deposits or cultural features, and the limited and non-diagnostic nature of the previous find, it is WSP's opinion that the portion of Site VT-AD-0463 located within the assessment area lacks the potential to further understanding of Late Archaic lithic scatters in the Champlain Valley region of Vermont. This portion of the site would therefore not contribute to the site's National Register of Historic Places (NRHP) eligibility under Criterion D. WSP's opinion is that further archaeological testing in this portion of the site would not yield additional data, as the archaeological potential of this portion of the site has been exhausted.

In WSP's opinion, future upgrades and ground-disturbing activities in the assessment area will not adversely affect the portion of Site VT-AD-0463 within the assessment area. Portions of Site VT-AD-0463 outside the current Middlebury Substation assessment area remain unevaluated as to level of integrity and NRHP eligibility, and should the project area be expanded to the south, further archaeological testing of unevaluated portions of Site VT-AD-0463 might be required.

Architectural Survey

In 2022 WSP completed an Architectural Reconnaissance Survey (WSP 2022). The purpose of the survey was to determine if any historic architectural resources are present within a 0.25-mile radius of the Middlebury Substation (the architectural area of potential effect [APE]) that have been previously listed in the State Register of Historic Place (SRHP) and/or the NRHP (the criteria for listing in both are identical), and to identify any previously unsurveyed historic architectural resources in the APE that may be eligible for listing in the SRHP/NRHP. A review of the available historical mapping and aerial imagery and the results of the survey identified five properties in the architectural APE, of which four had been previously surveyed and listed in the SRHP collectively as "Marble Works (Former Addison County Marble Quarry)." No additional properties were found to be potentially eligible for listing in the SRHP/NRHP during the survey. In WSP's opinion, three of the previously listed four properties, consisting of worker housing for the marble quarry (Marble Quarry Worker Housing), were no longer eligible because of extensive renovations that have compromised its integrity of materials, design, and workmanship. The last resource, the Mill, was not visible from the public roadway, and no recommendation could be

made on its historic integrity; therefore, in WSP's opinion, it should remain listed in the SRHP. In WSP's opinion, the newly identified resource, Quarry Road Farms, did not meet eligibility criteria for listing in the SRHP/NRHP.

Conclusion

One gap analysis, two ARAs, and a Phase IB Archaeology Survey conducted by WSP in support of VELCO's Middlebury Substation Project identified no significant (i.e., eligible for listing in the SRHP/NRHP) archaeological resources in the project area. The assessments collectively covered the 4.51-hectare (11.16-acre) project area, and the Phase IB survey investigated the 1.28 hectares (3.16 acres) in the project area deemed archaeologically sensitive. Although the portion of Site VT-AD-0463 located in the APE was investigated with close-interval shovel tests, this site was not relocated. In WSP's opinion, future upgrades and ground-disturbing activities in the APE will not adversely affect this portion of Site VT-AD-0463. Portions of Site VT-AD-0463 outside the current Middlebury Substation project area remain unevaluated as to level of integrity and NRHP eligibility, and should the project area be expanded to the south, further archaeological testing of unevaluated portions of Site VT-AD-0463 might be required.

WSP completed one Architectural Survey that relocated four properties in the Middlebury Substation architectural APE that had been previously surveyed and listed in the SRHP collectively as "Marble Works (Former Addison County Marble Quarry)." The survey also identified one new historic resource, Quarry Road Farms. Of the five properties, it is WSP's opinion that three properties previously listed in the SRHP (the three residences comprising the Marble Works Worker Housing) are no longer eligible because of compromised integrity. The last resource, the Mill, was not visible from the public roadway, and no recommendation can be made on its historic integrity; therefore, in WSP's opinion, it should remain listed in the SRHP. In WSP's opinion, the newly identified resource, Quarry Road Farms, is not eligible for the SRHP/NRHP. Therefore, it is WSP's opinion that the project will have no undue adverse impact on historic sites.

References

The Louis Berger Group, Inc. [Louis Berger]

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WSP USA Inc. [WSP]

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