

**APPENDIX 14H:  
DETERMINATION OF EFFECTS FORM**

## **CHINOOK SOLAR PROJECT, FITZWILLIAM, RPR #9541**

### **RESULTS OF EFFECT EVALUATION FOR Fitzwilliam Common Historic District, Fitzwilliam**

<b>DEFINITION OF EFFECT</b>	<b>EVALUATION</b>
An effect may occur when there is alteration to the characteristics of a historic property qualifying it for inclusion in or eligible for the National Register as defined in 36 CFR Section 800.16(1).	The Chinook Solar Project (the “Project”), located in the Town of Fitzwilliam, New Hampshire, has no potential to cause direct or indirect effects on the Fitzwilliam Common Historic District. The Project, which is more than one mile distant from the District, will not physically alter any property within the District and will not be visible from any location in the District, with the possible exception of the belfry tower of the Third Fitzwilliam Meetinghouse. The Project has no potential to diminish the setting or any other aspect of the District’s integrity.
<b>RECOMMENDED FINDING</b> (No Historic Properties Affected or Historic Properties Affected – Complete Table 2 if Historic Properties Affected)	No Historic Properties Affected

#### 1) Description of the Historic Property

The Fitzwilliam Common Historic District (the “District”) is located at the crossroads formed by the intersections of State Route 119, State Route 12, and Templeton Turnpike (Figures 1 and 2). The District comprises the historic civic center of Fitzwilliam and is made up of 23 contributing resources consisting of 20 buildings, three sites and two non-contributing buildings (Figure 2). The buildings are organized around Fitzwilliam Common (the “Common”), a one-half-acre, elongated triangle-shaped open space oriented with its base to the north and apex to the south (Figure 3, Photo 1). The Common is bordered by a wood rail and granite post fence and is the site of several commemorative objects, including a three-tiered cast iron fountain, a Civil War Monument, and a flagpole. Contributing buildings range in age from ca. 1795 through ca. 1880 (most date from the first half of the nineteenth century) and include a variety of functional types associated with the District’s history as a civic, social, religious, and commercial center (Photos 2-3). Notable buildings include the Third Fitzwilliam Meetinghouse (1817), which was listed in the National Register as an individual property in 1977 (Photo 4); Fitzwilliam Town Library (1804, Photo 5); Fitzwilliam Community Church (1857, Photo 6); and Fitzwilliam Inn (1843, Photo 7). Among the contributing residential properties are vernacular adaptations of popular contemporary architecture, including the Federal-style Steeplechase House (ca. 1800, Photo 8) and Greek Revival-style Connelly House (c. 1795, remodeled ca. 1830, Photo 9).

## 2) Significance Statement (including National Register Criteria)

The District is listed in the National Register under Criterion C in the areas of architecture and community planning. It possesses integrity of location, design, setting, materials, workmanship, feeling, and association for the period of significance which runs from 1765, when Fitzwilliam was chartered as a town, to 1947, the 50-year cut-off date at the time the District was listed in the National Register. This area constituted the center of Fitzwilliam from its earliest European settlement and developed a civic, religious, commercial, and transportation hub in the early nineteenth century. The District is significant architecturally as a largely intact and unified traditional rural New Hampshire townscape. With the exception of door surrounds, there is a general lack of stylistic detailing in the structures as is typical in small rural towns. But together, this group of primarily vernacular buildings constructed around the Common form a cohesive unit, a distinguishable entity whose components, taken individually, lack the same presence. It is also a good example of the settlement patterns and community planning of the late eighteenth and early nineteenth centuries. Organized around a central common that is surrounded by roads and adjacent development of a variety of building types, the District stands out as one of the most cohesive village centers of its type in the Monadnock region.<sup>1</sup>

## 3) National Register Boundary description

The National Register boundary includes 17 properties fronting or immediately adjacent to the Common as depicted on Figure 2.

## 4) Relationship of the Project to the District

The Project site is located southeast of the District about 1.3 miles at its closest point and 2.75 at its most distant (see Figure 1). It is within an undeveloped area that has been heavily managed for timber over time and is roughly bounded by State Route 119 on the north, a transmission line right-of-way (ROW) to the east, and State Route 12 to the west. The Project site is made up of seven contiguous irregularly shaped parcels totaling more than 500 acres of land and extends about 1.9 miles south from the northernmost property line on State Route 119 and is about 0.5-mile wide at its widest on a northeast to southwest axis. The site is situated on land that slopes downward to the west from the crest of Fullam Hill (elevation 1,265 ft)<sup>2</sup> to Scott Brook (elevation 1,060 ft). The land rises west of Scott Brook to a hill with an elevation of 1,175 ft and then declines into another creek valley before rising again to the area where the District is located.

## 5) Effect Evaluation Justification

The Project has no potential to cause direct or indirect effects on the District.

The Project has no potential to physically alter or damage any property in the District, therefore the effects assessment was limited to determining the potential of the Project to cause visual impacts. Based on data and simulations from a Visual Impact Assessment completed by T.J. Boyle Associates,<sup>3</sup> the elevations of the highest points in the District and the Project are about equal (1,195 ft.) and the intervening hill, even without factoring in any vegetation, would block most views of the Project from the District (Figure 4). When vegetation is taken into account, there are no potential views of the Project from any part of the District at ground level (Figure 5). The view from the contributing properties in the eastern portion of the

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<sup>1</sup> Information compiled from Fitzwilliam Historical Society, Fitzwilliam Common Historic District, National Register of Historic Places Registration Form, NRIS No. 97000399. NHDHR No. FIT0018.

<sup>2</sup> Elevations are approximate and are based on data acquired from Google Earth Pro version 7.3.2.

<sup>3</sup> T.J. Boyle Associates. Chinook Solar, Fitzwilliam, New Hampshire, Visual Impact Analysis Report. Report submitted to Chinook Solar, LLC, July 11, 2019.

District, which are oriented with their facades facing west toward the Common, are immediately obscured by stands of mature deciduous and evergreen trees that are located along the rear property lines (Photos 10-13) beyond the immediate setting of the District and rise above the roof lines of the buildings. Views toward the Project from the buildings on the west side of the Common are further blocked by the closely packed buildings to the east (Photo 14).

The only potential view of the Project from the District is from the belfry of the Third Fitzwilliam Meetinghouse (Figure 6 and Photos 15-16). The view would be limited to an interruption in the tree cover due to clearing for the Project and the solar panel field would likely not be visible below the surrounding tree line. The view in that vicinity has already been modified by the presence of the transmission line structures, which are taller than the solar panels and at a higher elevation, but still barely discernible in the viewshed from the tower. The tower is not accessible to the public and it was not designed to function as a view point for the surrounding countryside. Views from the belfry are, therefore, not a characteristic of the significance of the Meetinghouse.

A drive-over conducted to determine whether any part of the District would be visible from Project area yielded only one vantage point at a cleared area near the junction of State Route 119 and Fullam Hill Road about 0.25 mile east of the Project limit. The point is higher in elevation than the Project and is approximately two miles from the District. The belfry of the Meetinghouse and the steeple of the Fitzwilliam Community Church are barely visible against the green background of the surrounding vegetation (Figure 7).

Finally, long distance views to or from the District are not character-defining features of significance. The District is listed in the National Register under Criterion C because it contains a highly intact and cohesive collection of historic vernacular architectural resources and function property types organized around and oriented around a central common. The District developed as it did because of the intersecting roads and central location that made it a good location as a town center. The only important views are those that can be observed from within or approaching the District and the setting, as an aspect of its integrity and significance, and they are limited to the immediate environs. The Project, which is more than one-mile distant, has no potential to alter or otherwise diminish the setting or any other aspect of the District's integrity.

#### 6) Adverse Effect Evaluation Justification

Not applicable



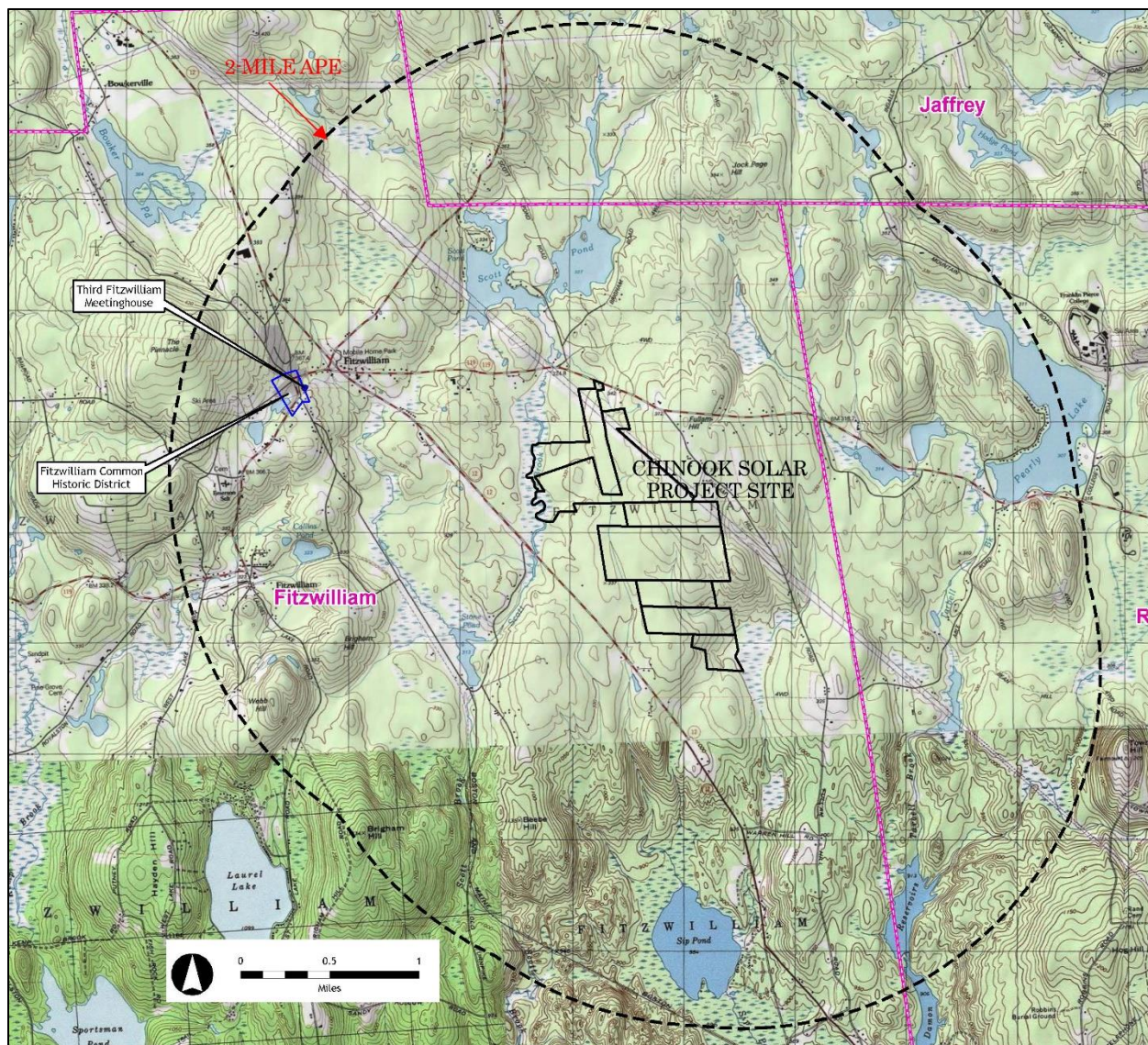


Figure 1. Location of the Chinook Solar Project showing its relation to the Fitzwilliam Common Historic District. The “2-Mile APE” references that area of potential effects that was established for the Project in consultation with the New Hampshire Division of Historical Resources.

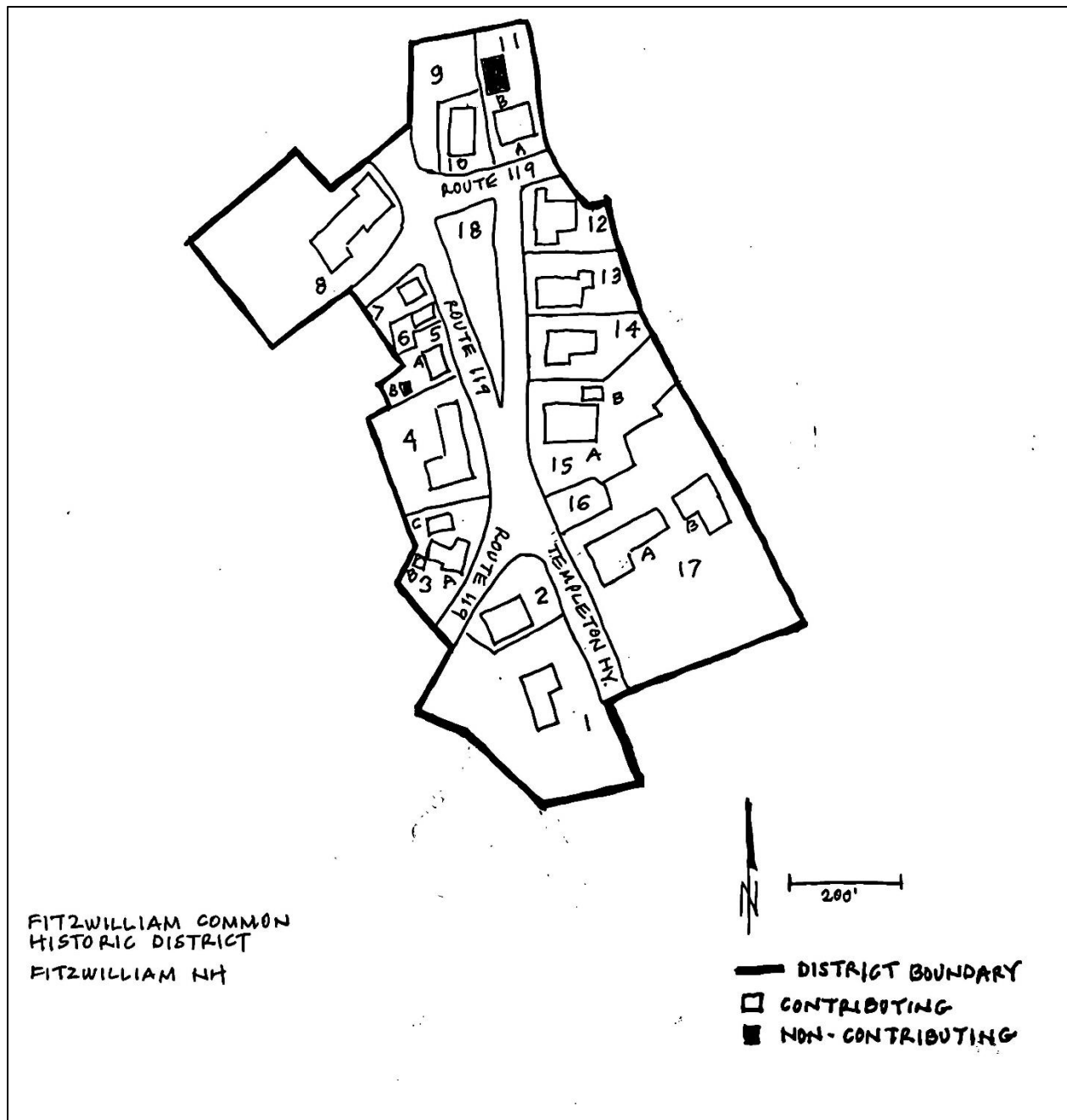


Figure 2. District Map from the Fitzwilliam Common Historic District National Register registration form.



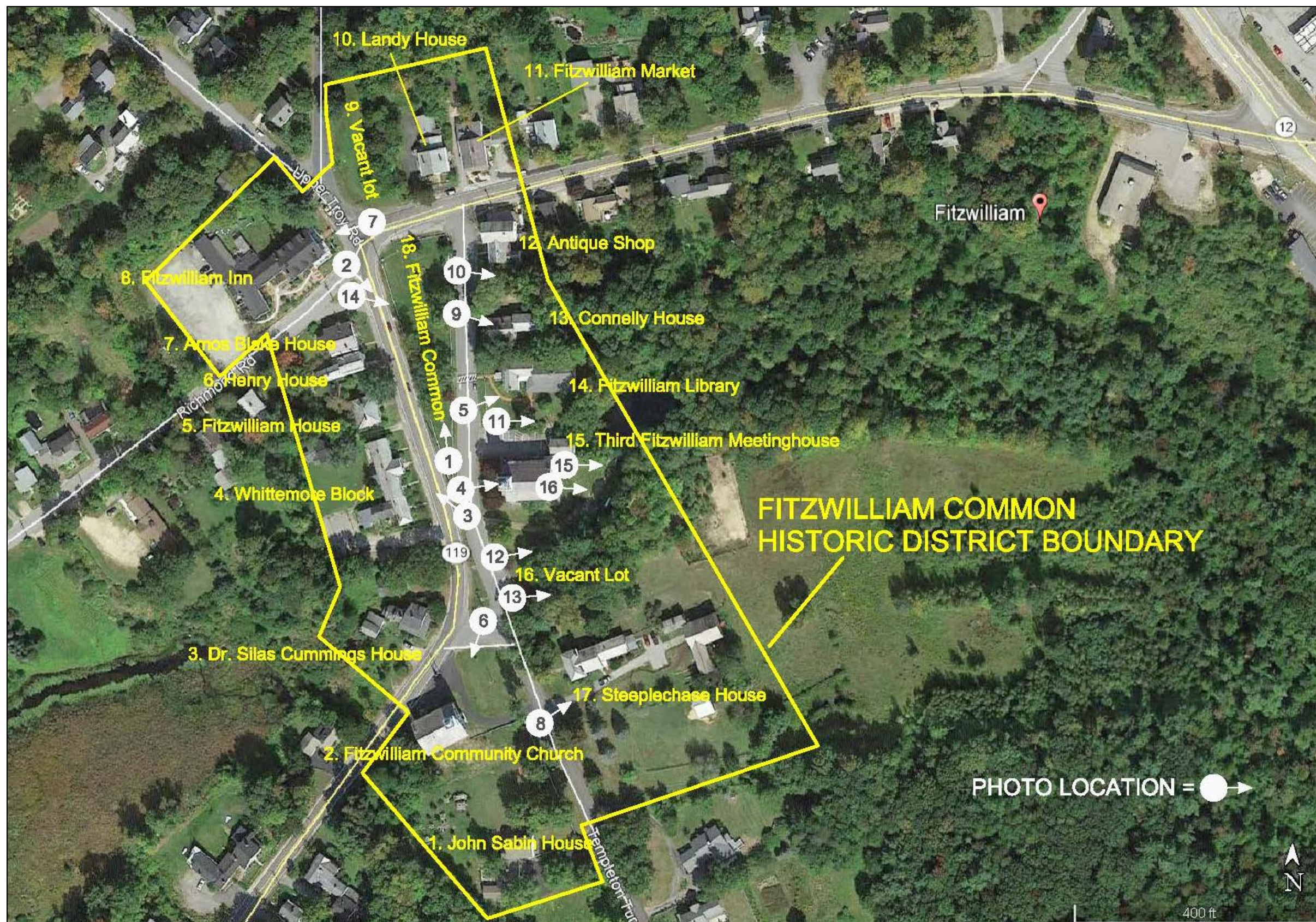


Figure 3. Fitzwilliam Common Historic District photograph location key.



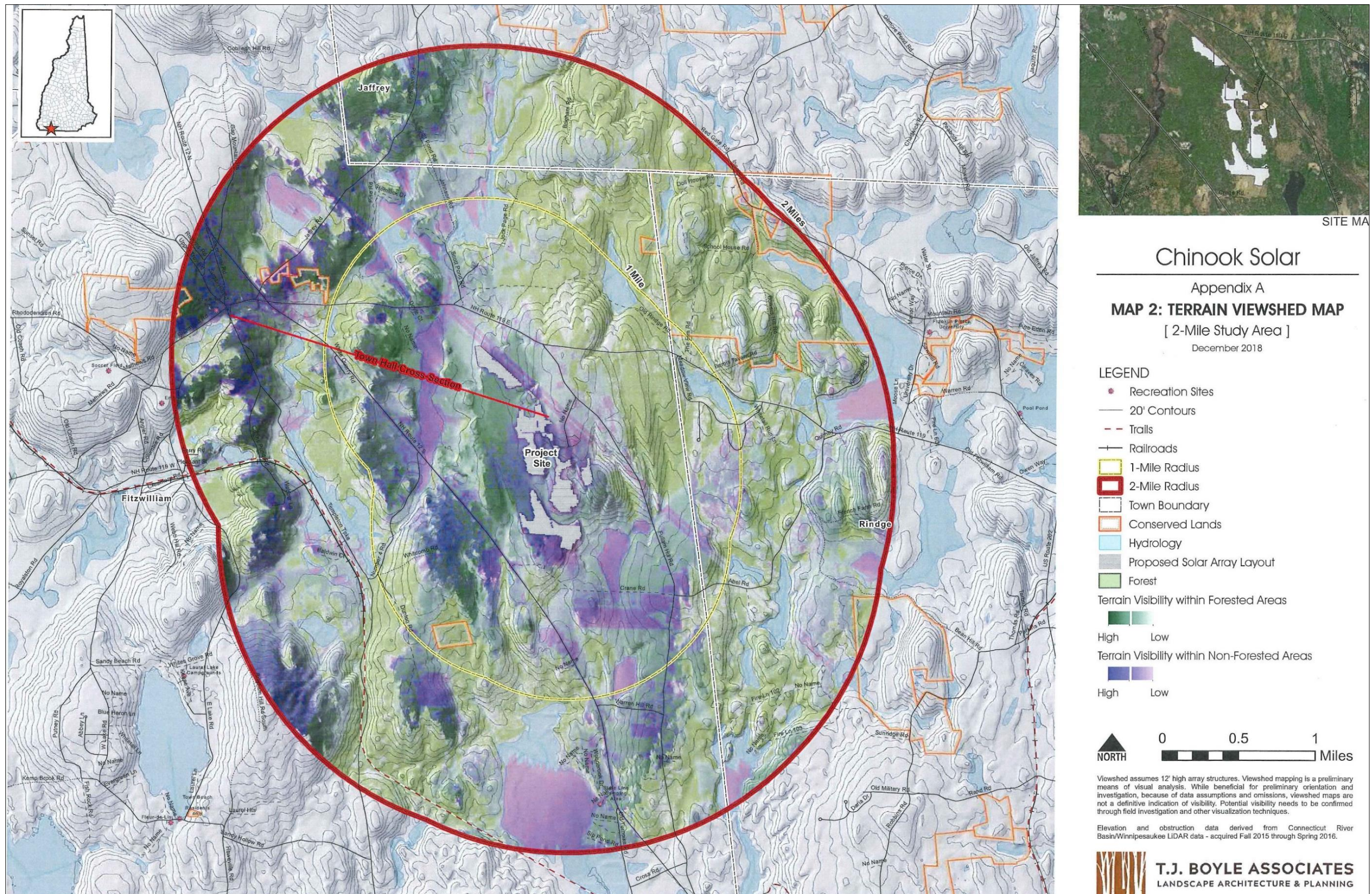


Figure 4. Terrain viewshed map showing visibility of the Project from the District (T.J. Boyle Associates 2019).



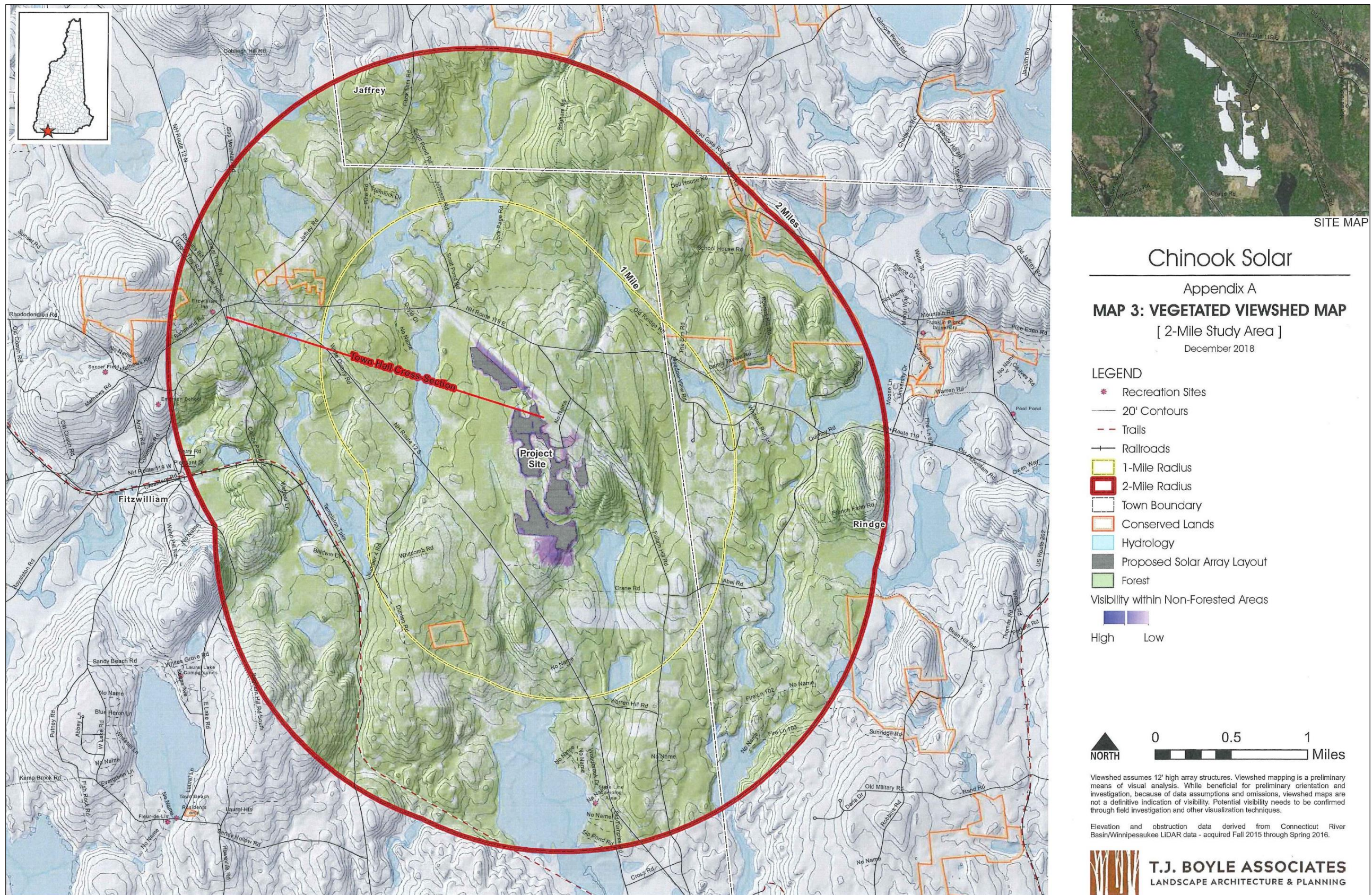
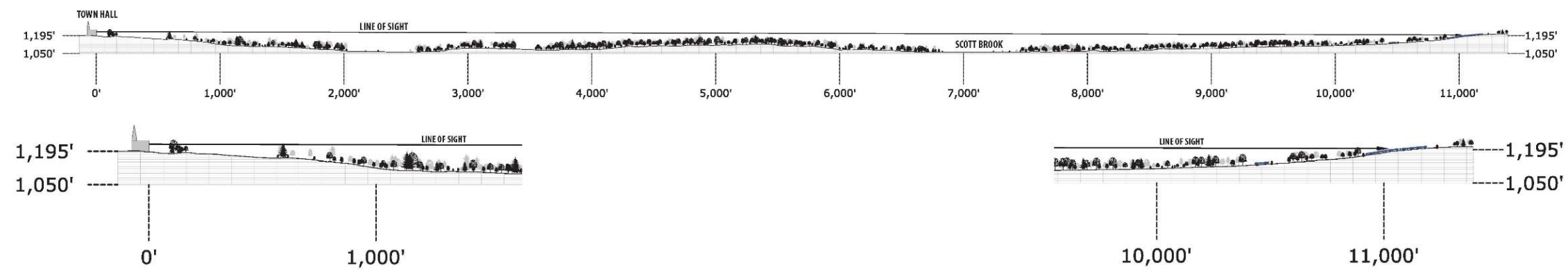
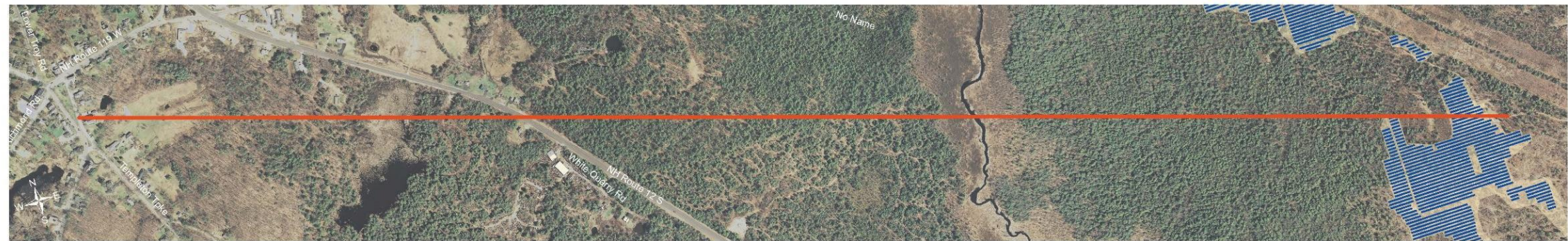
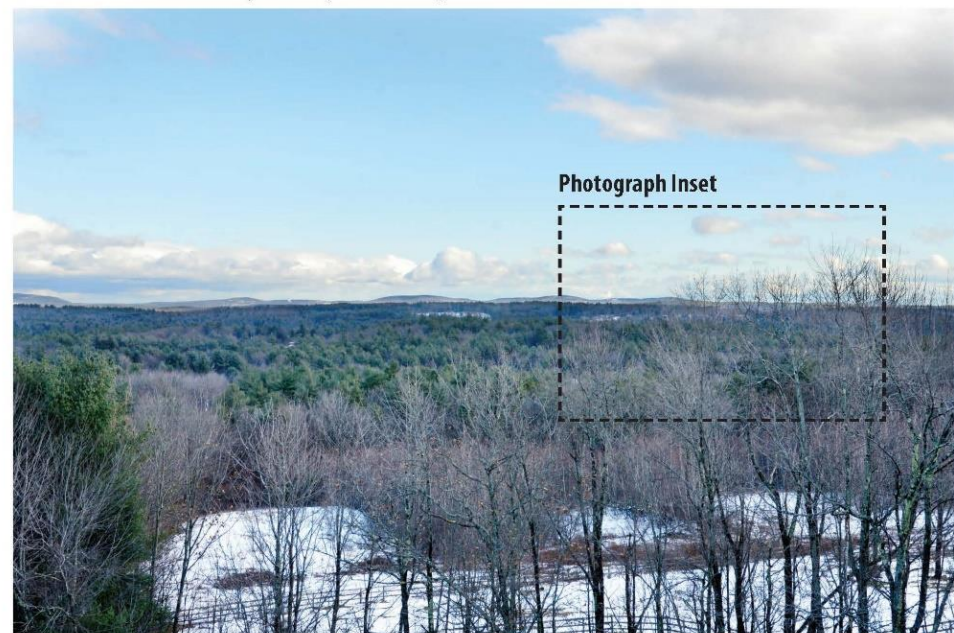


Figure 5. Vegetated viewshed map showing visibility of the Project from the District (T.J. Boyle Associates 2019).





View from Town Hall Belfry Looking Toward Project Site



Photograph Inset



**NOTES:**

Tree Heights Based On Connecticut River Watershed Lidar (2015) Acquired From NH Granit LiDAR Distribution Site. Photograph Taken December 3, 2018. Photo adjusted for clarity.

Figure 6. Analysis of the view from the belfry tower of the Third Fitzwilliam Meetinghouse toward the proposed Chinook Solar Project (T.J. Boyle Associates, January 2019).





Figure 7. View toward the District from cleared lot at the southwest corner of the intersection of State Route 119 and Fullam Hill Road.





Photo 1. Fitzwilliam Common, facing north.



Photo 2. Streetscape view of Fitzwilliam Common and buildings in eastern portion of the District.





Photo 3. Streetscape view of buildings in eastern portion of the District.



Photo 4. Fitzwilliam Third Meeting House, 1817.





Photo 5. Fitzwilliam Town Library, 1804



Photo 6. Fitzwilliam Community Church, 1857/1890





Photo 7. Fitzwilliam Inn, 1843.



Photo 8. Steeplechase House, c. 1800.





Photo 9. Connelly House, c. 1795/remodeled c. 1830-40.



Photo 10. View between Antique Shop and Connelly House showing trees that block views to the east toward the Project.





Photo 11. View from the south yard of the Fitzwilliam Town Library showing trees that block views to the east toward the Project.



Photo 12. View from the parking lot of the Third Fitzwilliam Meeting House showing trees that block views to the east toward the Project.





Photo 13. View from the contributing vacant lot in the south end of the District showing a berm and trees that block views to the east toward the Project.



Photo 14. View from the buildings in the west portion of the District showing buildings and trees that block views to the east toward the Project.





Photo 15. View from second floor of the Third Fitzwilliam Meeting House showing trees that block views to the east toward the Project.



Photos 16. View from the belfry tower of the Third Fitzwilliam Meeting House, the only vantage point in the District where the Project has any potential to be visible (photo courtesy of T.J. Boyle Associates).