National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, How to Complete the National Register of Historic Places Registration Form. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance of the property being categories and subcategories from the instructions.

1. Name of Property	JUL - 1 2016
Historic name: <u>Marsh-Billings-Rockefeller National</u> Other names/site number: <u></u>	I Historical Park Nat. Register of Historic Place National Park Service
Name of related multiple property listing: _Agricultural Resources of Vermont, MPDF (640008) (Enter "N/A" if property is not part of a multiple prop	
2. Location	
Street & number: 54 Elm Street City or town: Woodstock State: Windsor Not For Publication: Vicinity:	County:VT
3. State/Federal Agency Certification	
As the designated authority under the National Histor	ic Preservation Act, as amended,
I hereby certify that this nomination request the documentation standards for registering properties Places and meets the procedural and professional requ	s in the National Register of Historic
In my opinion, the property _x_ meetsdoes not recommend that this property be considered significal level(s) of significance:	
<u>x</u> national <u>statewide</u> <u>loca</u> Applicable National Register Criteria:	al
<u>x</u> A <u>x</u> B <u>x</u> C _D	
Joy Feeling	6/30/2016
Signature of certifying official/Tifle:	Date
State or Federal agency/bureau or Tribal Gove	ernment
In my opinion, the property meets does n	not meet the National Register criteria.
Signature of commenting official:	Date
Title:	State or Federal agency/bureau or Tribal Government

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Title:	State or Federal agency/bureau or Tribal Government
Signature of commenting official:	Date
In my opinion, the property meets does	not meet the National Register criteria.
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State or Federal agency/bureau or Tribal Gov	ernment
Signature of certifying official/Title:	Date
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X nationalstatewideloca Applicable National Register Criteria:	ıl
level(s) of significance:	int at the following
In my opinion, the property X meets does not recommend that this property be considered significant	ot meet the National Register Criteria. I
I hereby certify that this X nomination request the documentation standards for registering properties. Places and meets the procedural and professional request	es in the National Register of Historic
As the designated authority under the National History	
3. State/Federal Agency Certification	
2. Location Street & number: 54 Elm Street City or town: Woodstock State: VT Country Not For Publication: Vicinity:	nty: _Windsor
(Enter "N/A" if property is not part of a multiple prop	perty listing
Agricultural Resources of Vermont, MPDF	
Other names/site number: Name of related multiple property listing:	
Name of Property Historic name: _Marsh-Billings-Rockefeller National	al Historical Park

Marsh-Billings-Rockefeller National Historical Park Name of Property

Windsor County, VT County and State

4. National Park Service Certification		
I hereby certify that this property is:		
entered in the National Register	3	
determined eligible for the National Register		
determined not eligible for the National Register		
removed from the National Register		
other (explain:)		
Signature of the Keeper	8.15.2016 Date of Action	
O h		
5. Classification		
Ownership of Property		
(Check as many boxes as apply.)		
Private:		
Public – Local		
Public – State		
Public – Federal X		
Category of Property		
(Check only one box.)		
Building(s)		
District		
Site		
Structure		
Object		

Marsh-Billings-Rockefeller	National	Historical	Park
Name of Property			

Windsor County, VT	
County and State	

N	umber	of F	Resources	within	Pro	perty
		~ ~				

 (Do not include previously listed resources in the count)

 Contributing
 Noncontributing

 5
 buildings

 10
 0
 sites

 18
 0
 structures

 7
 0
 objects

 40
 5
 Total

Number of contributing resources previously listed in the National Register _____9

6. Function or Use

Historic Functions

(Enter categories from instructions.)

DOMESTIC/single dwelling

LANDSCAPE/garden

LANDSCAPE/forest

AGRICULTURE/agricultural outbuilding

AGRICULTURE/agricultural field

Current Functions

(Enter categories from instructions.)

LANDSCAPE/park

RECREATION/CULTURE/outdoor recreation

RECREATION/CULTURE/museum

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

7. Description

Architectural Classification

(Enter categories from instructions.)

EARLY REPUBLIC/Federal

MID-19TH CENTURY/Swiss Chalet

LATE VICTORIAN/Second Empire

LATE VICTORIAN/Queen Anne

LATE 19TH AND EARLY 20TH CENTURY AMERICAN MOVEMENTS/Craftsman

Materials: (enter categories from instructions	s.)	
Principal exterior materials of the property:	N/A	

Narrative Description

(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with a summary paragraph that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

Summary Paragraph

The Marsh-Billings-Rockefeller National Historical Park (NHP) Historic District (the District) is located in the town of Woodstock, Windsor County, Vermont. The District boundary encompasses 555 acres from Elm Street west across Mount Tom to Prosper Road and contains a total of 49 contributing resources (including 9 previously listed). The historic resources include the brick Mansion constructed in 1805–1807 for Charles Marsh, Sr. and remodeled in 1869 and 1885–1886 for Frederick Billings; the surrounding designed landscapes of the Mansion Grounds, developed between 1869 and 1997 by the Billings and Rockefeller families, which include gardens, outbuildings, woods, and a network of estate drives; and the Mount Tom Forest, where Frederick Billings and his heirs established plantation stands, encouraged native tree regeneration by removing livestock from most of the hillside, and provided access to the scenic woods and views from Mount Tom via a network of carriage drives between the 1870s and the 1950s. The previously listed resources are the Mansion, Mansion Terrace Designed Landscape, System of Estate Drives, Coachman's Cottage, Belvedere, Bowling Alley, Greenhouse, Stable, and Flower Garden. The five non-contributing resources within the District boundary consist of an educational building constructed by the National Park Service in 2007 (the Forest Center) and four maintenance sheds constructed in 2013.

The United States Congress established Marsh-Billings NHP on August 26, 1992 (Public Law 102-350) to interpret the history of conservation stewardship in America, as well as the contributions of George Perkins Marsh, Frederick and Julia Billings, Mary Billings French, Mary French Rockefeller, and

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

Laurance Spelman Rockefeller to the conservation and land stewardship movement. On October 21, 1998, Congress amended Public Law 102-350 through Public Law 105-277, Section 143, to change the name of the park from Marsh-Billings NHP to Marsh-Billings-Rockefeller NHP. The 643 acres within the authorized boundary of the NHP encompass the core of the historic Billings estate. The legislation identifies two distinct zones within the authorized boundary: the Historic Zone, which corresponds to the 555 federally owned acres operated by the National Park Service and comprises the Mansion Grounds and Mount Tom Forest; and the adjacent Protection Zone, which corresponds to the 88 privately owned acres on the east side of Elm Street, across from the Mansion, operated by the Woodstock Foundation, Inc. as Billings Farm & Museum. The National Register of Historic Places (National Register) Historic District defined in this Registration Form includes only the Historic Zone and not the Protection Zone.

The Billings estate historically contained additional property that lies outside the authorized park boundary and the National Register District boundary. Adjacent properties associated with Billings include Billings Park, a 136-acre public park on the north and south peaks of Mount Tom owned by the Town of Woodstock since circa (c.) 1952 and accessed by carriage roads and trails through the NHP, and the privately owned parcels of land at 3 North Street (the former gardener's cottage) and 1 River Street. To protect the historic and natural setting of the Mansion's viewshed, the National Park Service holds scenic easements on several parcels of land outside the authorized park boundary and the National Register District boundary. The approximately 300 acres, referred to as the Scenic Zone, are located east and south of the District on Blake Hill and Mount Peg and were not historically part of the Frederick Billings estate.⁴

Summary of Previous National Register Documentation

The Mansion and 40 surrounding acres were designated a National Historic Landmark (NHL) on June 11, 1967, as the Marsh (George Perkins) Boyhood Home (NRIS #67000023). A nomination form that affirmed the boundary for the NHL listing was accepted by the Keeper on September 25, 1975, and included the following resources in addition to the Marsh House/Marsh-Billings House (Mansion): the Mansion Grounds (Mansion Terrace Designed Landscape), System of Estate Drives, Flower Garden, Belvedere, Stable, Caretaker's Cottage (Coachman's Cottage), Greenhouse, and Bowling Alley. The Mansion and the surrounding grounds within the Woodstock Village limits were listed in the National Register as contributing components of the Woodstock Village Historic District on January 22, 1973 (NRIS #73000274). With the establishment of the NHP in 1992, all lands within the authorized boundary were listed administratively in the National Register. No comprehensive park-wide National Register documentation has ever been formally approved. However, the National Park Service has attempted to identify contributing and non-contributing resources within the park through other means, including consultation with the Vermont State Historic Preservation Officer on the park's List of Classified

¹ The term "authorized boundary" refers to the land that has been authorized under legislation passed by the United States Congress for inclusion in a National Park.

² Billings Farm & Museum also includes approximately 112 additional acres that lie outside the NHP Protection Zone.

³ In accordance with the National Park Service's *Cultural Resource Management Guideline* (NPS-28) Appendix Q, National Register boundaries for historic units of the National Park System may not exceed the authorized boundary. The National Register boundary may, however, be less than the authorized park boundary to exclude, for example, non-historic buffer zones or areas that have lost historical integrity.

⁴ The Town of Woodstock's Billings Park Commission manages the approximately 65-acre Mount Peg Park, which includes lands within the Scenic Zone. A bequest of 21 acres at the top of Mount Peg from Frederick Billings' daughter Elizabeth to the Town in 1945 formed the initial extent of the park (Waite 2014).

⁵ The NHL designation included the adjacent property at 3 North Street as a non-contributing component, but the parcel was subdivided from the Mansion Grounds when the NHP was created in 1992.

Marsh-Billings-Rockefeller National Historical Park Name of Property

Windsor County, VT County and State

Structures (LCS), Cultural Landscapes Inventory reports, and Section 106 compliance projects. This Registration Form, therefore, constitutes the original National Register documentation for Marsh-Billings-Rockefeller NHP. Its purpose is to define the National Register criteria under which the District derives its significance, establish legally defensible National Register boundaries, and provide a full accounting of contributing and non-contributing resources.

Narrative Description

Setting

Marsh-Billings-Rockefeller NHP is nestled among the rolling hills and pastures of the Ottauquechee River Valley in east-central Vermont, 10 miles west of the Connecticut River, on the northern side of Mount Tom in the rural outskirts of Woodstock Village. The site forms a prominent forested and agricultural landscape along the northern edge of the village, approximately one-quarter mile from the village green across the Ottauquechee River, a major tributary of the Connecticut River. Woodstock, the county seat of Windsor County, has a combined village/town population of 3,048 (2010 census) and is a four-season resort community. Narrow valleys of fields and scattered houses framed by round forested hills characterize the surrounding countryside, with denser development in the compact linear village to the south and broad open farm spaces to the east. Mount Tom and the Ottauquechee River largely determined the form of Woodstock and remain the dominant landscape features of the region. Carriage roads and bridle trails through the District provide access to the town-owned Billings Park at the summit of Mount Tom, which lies within the viewshed of the Mansion Grounds and continues to be an integral part of the larger Forest landscape.

Public roads that follow the natural topography border most of the District. Elm Street (Vermont Route 12) is a two-lane asphalt-paved road along the east side and part of the north side. It is the primary highway connecting Woodstock to Interstate 89 approximately 21 miles to the north. The uncurbed road has turf shoulders and an asphalt-paved pathway along the south side across from the Mansion Grounds. On the south, River Street is a two-lane asphalt-paved local road that runs between the Mansion Grounds and the north side of the Ottauquechee River. A green-painted metal guardrail borders the road along the river. Prosper Road, an unpaved town road connecting the villages of West Woodstock and Prosper, forms the District's western boundary.

Adjacent to the District on the broad floodplain to the east, Billings Farm & Museum (partially located within the Protection Zone of Marsh-Billings-Rockefeller NHP) comprises the historical center of the agricultural operation of Frederick Billings' model dairy farm. The privately owned and operated site has been open to the public since 1983 as a working dairy farm, historic attraction, and educational museum of agriculture and rural culture. Its open flat landscape includes cultivated fields, fenced pastures, and a complex of historic and modern buildings near the northeast corner, all of which lie within a key viewshed from the Mansion Grounds. Trees and other vegetation line the Ottauquechee River course, creating a shady border with corresponding panoramic views back to the Mansion and Mount Tom hillside. Split-rail fencing divides the farm's pastures and work areas. Livestock on the farm include Jersey cows, sheep, horses, and chickens. Crops include hay, alfalfa, corn, oats, and soybean planted in rotation. The field configuration varies yearly but maintains an overall orthogonal layout. Extensive cropland is also cultivated across the river. Two historic farm residences are set back from Elm Street on a slightly elevated area with front entrances and porches facing the street. Lawns, shade trees, and ornamental plantings add to the residential character of this area. A small orchard is laid out to the south in an open area sloping down from the street. Behind the residences, the more recently constructed

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

Billings Farm Visitor Center is compatible with the older vernacular farm buildings that include working barns and outbuildings arranged in an orthogonal fashion, many connected. The museum parking lot off Elm Street, surrounded by simple plantings of ornamental trees and perennials, also serves Marsh-Billings-Rockefeller NHP.

Resource Descriptions⁶

The District comprises two distinct landscapes situated on and around Mount Tom: the Mansion Grounds and the Forest. The Mansion Grounds, which contain the historically residential portion of the estate, correspond to the approximately 34 acres of the District between Elm Street and the west side of the Upper Meadow that fall within the boundaries of Woodstock Village. The Forest corresponds to the land to the west in the town of Woodstock and extends across the north slope of Mount Tom to a series of ridges. The entire District extends a distance of approximately 1.75 miles east to west from Elm Street to Prosper Road and measures approximately 0.75 mile from north to south at its widest point. Topographical elevations range from about 700 to 1,420 ft above sea level.

The Mansion Grounds occupy the elevated, relatively level area above the Ottauquechee River floodplain and extend onto the eastern foothill of Mount Tom that rises to the immediate west of the Mansion, which is the centerpiece of the estate. The rambling, three-story, brick, Queen Anne-style Mansion is positioned on a terrace at an average elevation of 30 ft above Elm Street, set apart from the street by a 3-ft-high stone wall and perimeter conifer plantations. Behind the Mansion, the land ascends steeply another 80 ft before leveling out at a hilltop pasture. The peaked roofs and chimneys of the Mansion punctuate the open spaces within the Grounds defined by the surrounding forests and hedges. The great height of these trees enhances the dramatic natural topography of the landscape. The ten other buildings located on the Mansion Grounds reflect a range of styles, primarily late-nineteenth-century High Victorian eclecticism, and functions related to the estate operations. The Grounds also include manicured lawns, formal and informal gardens, meadows, hillside forest stands, a tennis court, and a swimming pool. A system of elegant estate drives that curve throughout the Grounds connects the various buildings and sites to each other and to the Forest.

The rural Forest landscape on the steep northern side of Mount Tom comprises a mosaic of spaces formed by the interrelationship of hills and valleys, road and trail corridors, a patchwork of naturally regenerated and planted forest stands, open fields, a 14-acre mountain-top pond known as the Pogue, and small vista clearings at topographic high points. An extensive system of about 10 miles of carriage drives wends through the Forest. The carriage drive corridors are primarily enclosed by the forest canopy, except where openings provide views of sunlit-pastures and hayfields, of the Pogue lying between mountaintops, and

⁶ Portions of the subsequent resource descriptions are adapted from existing cultural resource documentation for the park, including the Cultural Landscape Report for the Mansion Grounds, Volume II: Existing Conditions & Analysis, John E. Auwaerter and George W. Curry (2005); Cultural Landscapes Inventory: Mansion Grounds and Forest, National Park Service (2008); Carriage Barn and Setting: Cultural Landscape & Historic Structure Report, Margie Coffin, H. Eliot Foulds, Barbara A. Yocum, and Bill Machurat (1997); Land Use History for Marsh-Billings National Historical Park, H. Eliot Foulds, Katharine Lacy, and Lauren G. Meier (1994); Marsh-Billings-Rockefeller Carriage Roads, HAER No. VT-27, National Park Service (2002); Treatment Plan and Management Recommendations for the Carriage Road System. Marsh-Billings-Rockefeller National Historical Park, Woodstock, Vermont, Paul Daniel Marriott + Associates and Willis Consulting Engineers, Inc. P.C. (2010); Marsh-Billings-Rockefeller National Historical Park. Site History and Existing Conditions, Sarah Wilcke, Leslie Morrisey, Jennifer Treadwell Morrissey, and James Morrissey (2000); and Forest Management Plan and Environmental Assessment for Marsh-Billings-Rockefeller National Historical Park, National Park Service (2006). Refer to these documents for more detailed information on all inventoried landscape features.

Marsh-Billings-Rockefeller National Historical Park
Name of Property

Windsor County, VT County and State

across meadows to Mt. Ascutney to the south. The highest point in the District is a ridge west of the Pogue that rises above the north and south peaks of Mount Tom (both located outside the District boundary in Billings Park). Skid trails, bridle paths, cross-country ski trails, and hiking trails also crisscross the Forest. Solitary wolf trees, granite boundary markers, and stone pasture walls relate to the Forest's prior upland farm use. The Pogue Brook, a perennial stream that drains the Pogue and most of the District into Barnard Brook to the north, feeds into the Ottauquechee River. Numerous intermittent streams, springs, wetlands, and seeps are also located in the Forest. Other manmade features include stone retaining walls, causeways, and culverts constructed as part of the carriage drive system to maintain an easy grade up the mountain and stone water troughs along the drives.

Mansion Grounds

The spatial organization of the Mansion Grounds is defined largely by its two distinct landforms: the lower terrace bordering River and Elm streets; and the hill, a foothill of Mount Tom, to the west. Each area is described separately below, and the estate drives that extend throughout both areas are described last. The terrace landscape is more manicured, while the hill is characterized by a naturalistic landscape that transitions to the more heavily forested slopes of Mount Tom. The topography within the grounds varies from a high point of 837.5 ft to the west of the Reservoir on the hill to an average low elevation of 705 ft at the perimeter stone wall along Elm Street. It includes the gentle, graded slopes of the Mansion lawn and the steep, rough slopes of the hillside and Elm/River Street perimeter.

Terrace

The most prominent buildings within the grounds—the Mansion, Stable (aka Carriage Barn/Visitor Center), and Belvedere—form focal points and organizing elements within the terrace landscape. The Mansion is located at the center of the terrace, with a garage immediately behind it. The Stable and two other service buildings are clustered to the north. A complex of buildings and gardens with the Belvedere as the focal point occupies the southwest portion of the terrace, between the south side of the hill and River Street. Smaller buildings and structures on the terrace include two small Summer Houses, two garages, the Coachman's Cottage (aka Double Cottage/Caretaker's Cottage), the Garden Workshop, the Bowling Alley, the Greenhouse, a tennis court, and a swimming pool. The vertical enclosure of surrounding forests and hedges defines the primary open space of the Mansion lawn and several ancillary spaces consisting of the swale extending north of the lawn and the gardens extending west of the lawn.

The Mansion (LCS No. 040538, contributing building) is the focal point and primary organizational element of the terrace landscape, facing east toward a view of the farm meadow framed by wooded hills. It consists of a three-story, side-gabled core augmented by several complex massing elements. The house measures approximately 78 ft by 129 ft, excluding the porches. It has copper sheet roofs, four tall brick chimney stacks, unpainted brick walls with white-painted wood trim, and a brick foundation. Terra cotta date plaques are centered in the main end gables: "1806" in the south gable and "1885" in the north. An open veranda wraps around the north, east, and west sides and has an attached porte-cochère on the north side. Polygonal bay windows flank the center entrance in the first story of the facade (east) elevation, with a prominent second-story polygonal bay and third-floor gable-roof balcony above the entrance. A substantial three-story brick addition at the southwest corner has a two-story square bay on the south elevation and a mansard roof on the west elevation. The north elevation features a gabled two-story square bay, and a two-and-one-half-story brick service wing extends from the northwest corner of the house. A 4-ft-high brick wall forms a small courtyard near the kitchen entrance. Queen Anne-style lattice work and jigsaw trim adorn the overhanging eaves, the central balcony, and the veranda.

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

The main entrance opens into a large central staircase hall with a double-width parlor to the south and a smaller parlor (Mary Rockefeller's prayer room) and dining room to the north. A side hall leads to the porte-cochère. The southwest addition contains a library on the first floor, and the kitchen and other service spaces are located in the northwest service wing, which also has a two-story caretaker's apartment with its own staircase. An elevator at the rear of the main hall provides access to the first, second, and third stories of the main house. The bedrooms on the upper stories all have closets and private bathrooms. Built-in cabinetry includes bookcases in the library and a sideboard in the dining room. The parlor, library, and third-story music room feature colored stained-glass windows fabricated by the Tiffany Glass Company and flocked or embossed wall coverings.

The Mansion retains architectural materials and elements from four major periods of construction and remodeling. Local builder Nathaniel Smith constructed the house from 1805 to 1807 as a two-story, Federal-style brick residence for Charles Marsh, Sr. Frederick Billings had it updated in 1869–1870 to a two-and-one-half-story, Stick-style design by architect William Ralph Emerson. In 1885–1886, he had it remodeled again by architect Henry Hudson Holly into the Queen Anne style; the exterior appears largely as Holly designed it. A 1956–1959 renovation designed by architect Theodor Muller for Laurance and Mary Rockefeller primarily altered the interior spaces on the third story and in the service wing, with exterior changes limited to the removal of third-story balconies on the north and south sides and the addition of the kitchen courtyard wall. Muller also added partitions on the second and third floors to create additional bathrooms. The Rockefellers added the elevator in 1973. The room layouts and window openings remain generally as they were after the 1869–1870 renovations, with the exception of the Muller renovations. The doors and window sashes, most of the interior hardwood paneling and trim finishes in the principal rooms (some have been painted), the fireplace mantels, built-in cabinetry, stained-glass windows, and embossed wall coverings all date to the 1885–1886 remodeling. The Mansion remains furnished almost as it was in 1998 and is open to the public.

Muller also designed a fallout shelter system for the Mansion, constructed between 1962 and 1964. The system consists of a large reinforced concrete shelter in the basement connected by a tunnel to two prefabricated metal tank shelters beneath the front lawn. The main shelter, with space for at least 20 people plus food and an emergency water source, has concrete-block walls and a reinforced concrete ceiling. It features a vestibule containing a control panel and kitchenette, a center room with a shower and chemical toilets, and bunk rooms to the left and right of the center room. Air intake valves in each of the bunk rooms have outlets under the Mansion porches. The tank shelters are situated opposite each other and perpendicular to the access tunnel off the left bunk room. Each tank shelter could accommodate eight people in bunks lining both walls that could be folded up when not in use. Each also contains a toilet, air intake valves, emergency radios, control panels for gas generators, and intercom and telephone jacks. Two fallout shelter escape hatches are spaced 30 ft apart on the Mansion lawn (one north of the main entrance and one east of the veranda). Sealed by standard, green-painted iron manhole covers with a diamond-shaped pattern, the hatches are largely invisible in the landscape. The tank shelters show evidence of metal corrosion but remain fully furnished as they were in the 1960s. The National Park Service has encased some of the contents in archival bags and replaced the food supply due to deterioration of the containers. The Park Service also performs mold mitigation on the shelters as needed.

The Mansion Garage (LCS No. 040541, contributing building) is a one-story, brick-faced masonry building located immediately to the rear (west) of the Mansion. The 22-ft-square, one-bay garage has a pyramidal wood-shingled roof with boxed eaves and a concrete foundation. A wide wood overhead door spans the east elevation, and a single wood board door is located at the east end of the south wall. The architect for the garage, completed by 1977, is unknown. The building now houses a wood-fired central heating system with underground piping that augments heating for the Mansion and Stable.

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

The banked, two-and-one-half-story, masonry and frame Stable (LCS No. 040521, contributing building) measures 66 ft square. Its massive and complex cruciform-shaped roof is two full stories in height, with metal shingles, flared eaves, a central cupola, and multiple gabled dormers. The cupola features a bell-shaped copper roof, a neoclassical railing with turned balusters and urn-topped newels around the louvered shaft, and a flared and wood-shingled four-sided base. The wood-frame walls of the lower two stories are covered by clapboard siding with a stringcourse between the first and second stories and a wide board water table above the foundation, both flared to shed water, and plain corner boards. The loft story has wood shingle siding. The one-story fieldstone-and-brickwork retaining walls on the south and west sides of the hill supported an earlier stable on the site. Extensions to these walls and the foundations on the north and east sides of the hill are brick with stone footings. A veneer of cut stones finishes the exposed exterior sides of all the foundation walls. The main entrance at the ground level of the south elevation is a pair of glazed doors with sidelights and transom behind the original sliding barn doors. Similar doors are located at the lower level of the north (rear) elevation. A pair of glazed, hinged doors opens off the loft story above the main entrance. Windows and their sashes are of various shapes and sizes, fixed and double-hung, as well as a round multi-light window high in the south gable. Architect Ehrick Kensett Rossiter, a nephew of Julia Billings, prepared the designs for the Queen Anne-style building constructed in 1895 partially on the foundation of an earlier Billings stable. In 1998-1999, the National Park Service converted the building to a visitor center, library, and administrative offices, with only minor changes to the exterior such as the installation of the double-leaf glazed doors behind the original sliding doors.

The one-and-one-half-story concrete Garage (LCS No. 040523, contributing building), aka Generator Garage, to the north of the Stable measures 37 ft by 26 ft and is banked into the adjoining hillside. The hipped slate roof has a central square louvered cupola, a large hipped dormer centered in the east roof slope, and smaller hipped dormers centered in the north and south roof slopes. The exterior walls are painted, parged, and scored to resemble ashlar blocks. The building rests on a poured concrete foundation. A large two-bay sliding door with fixed four-pane windows centered in each panel spans the northern two-thirds of the facade (east) elevation. A modern partition wall with a single one-light door is located behind the south panel, and a single two-over-two double-hung window is located at the south end of the facade. Two-over-two double-hung windows are symmetrically placed in the other three elevations, and the dormers all contain multi-paned fixed sash windows. The Billings family had the garage built in 1908 to house automobiles. The Rockefellers had an oil-fired Fairbanks-Morse electrical generator installed in the building sometime before 1967; the National Park Service moved the generator outside, north of the building, in 2010.

The one-and-one-half-story Coachman's Cottage (LCS No. 040522, contributing building) consists of two staggered, gabled sections, each measuring approximately 30 ft by 18 ft, with a center entrance in a projecting enclosed front (south) porch and two gabled dormers in the south roof slope. It has slate roofs, wood-shingle siding, and a rubble stone foundation below grade with brick above grade. The east section has an interior brick chimney, a rear entrance into a small projecting enclosed porch centered in the north elevation, and two gabled dormers in the north roof slope. A one-story enclosed porch with a low-pitched hipped roof, an entrance at the south end, a large 24-light fixed sash window, and a nine-light fixed window spans the width of the west section's west elevation. The west section also has a single large shed dormer in the north roof slope, with three three-light awning windows at the west end. The other windows on the building primarily contain six-over-six double-hung sash. The cottage was built as a single-family dwelling for Frederick Billings' coachman prior to 1877, probably c. 1870. Its foundation was raised for an unknown reason in 1887, and in 1945 it was split into two apartments. The building is currently used as park staff residences.

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

The Mansion Terrace Designed Landscape (LCS No. none, contributing site) encompasses the formal manicured landscape that surrounds the Mansion—composed of sweeping lawns, shade trees, and ornamental shrubs—and the service area along the swale. A roughly 3-acre Lawn (LCS No. none, historic associated feature) extends around three sides of the Mansion, sloping gently down toward Elm and River streets. Mature Norway spruce and hemlock plantations define the south edge, and a hemlock hedge with later shrubs forms a screen along the east edge. The lawn is largely open with several specimen trees and a grove of oak and maple trees located southwest of the Mansion. The roughly 1.5-acre, grassy Swale (LCS No. none, historic associated feature) north and west of the Mansion extends approximately 450 ft northeast from the Main Entrance Drive at the north edge of the lawn to the Coachman's Cottage. It begins at an elevation of 750 ft and drops 50 ft to Elm Street. The perimeter plantation and a grove of trees around the Tennis Court define the east edge of the swale, and the Stable and adjoining hill plantations form its west edge. The swale is maintained at a short height and uniform texture consistent with the lawn.

Evergreen plantings screen the Mansion terrace from the street, except where a break allows a panoramic view east from the Mansion's lawn, veranda, and upper floors across the Billings Farm land in the intervale to the hills beyond (Blake Hill to the east and Mount Peg to the southeast) covered with a mosaic of fields and forests. The vista, initially established with the construction of the Marsh house c. 1805, played an instrumental role in the organization of the Marsh place as well as the 1869 plans developed for the grounds by landscape architect Robert Morris Copeland. The viewshed, protected by scenic easements on more than 300 acres, encompasses primarily agricultural fields and wooded hills. Some commercial development along Route 4 East is visible in winter. Majestic Norway spruce, the property's signature tree recommended by Copeland as an ideal choice for creating picturesque romantic effects, forms much of the screening to the south and east and acts as a backdrop to the north and west of the Mansion. A c. 1971 clearing in the south perimeter spruce trees created a vista of the Ottauquechee River from the upper floors of the Mansion. The expansive views south are now largely obscured due to the growth of the hemlock screen, but a portion of the river is still visible from the third floor and the design intent remains in the patterns of the surrounding vegetation.

Pedestrian circulation is generally undefined within the site, with two exceptions. The <u>Mansion-Flower Garden Walk (LCS No. none, historic associated feature)</u> is a 200-ft-long, 6-ft-wide path that follows a sweeping alignment connecting the west entrance to the Mansion with stairs leading to the Flower Garden. The path is surfaced in washed pea gravel with large dark stone slab paving along the 25 ft leading up to the Mansion. The <u>Summer Houses Path (LCS No. none, historic associated feature)</u> follows an S-shaped alignment through the perimeter plantation between the Upper and Lower Summer Houses. Approximately 6 ft wide, the earthen path with no visible edging passes through the small open structures and ascends stone steps leading up to each. Small-scale historic features on the landscape include a 4-ft-high, cast-iron <u>Hitching Post (LCS No. 040543, historic associated feature)</u> located at the edge of an herbaceous bed on the west side of the Stable's main entrance. It exhibits a typical late-

⁷ "Historic associated feature" is a term used to enumerate and describe small-scale component features of a landscape, or a system of features, that are not individually countable according to National Register guidelines but that collectively constitute a single countable resource. The term was developed to reconcile the requirements of the National Park Service List of Classified Structures (LCS) and Cultural Landscapes Inventory (CLI) with National Register documentation guidelines. The LCS is an evaluated inventory of all historic and prehistoric buildings, structures, and objects that have historical, architectural, and/or engineering significance. The CLI is an evaluated inventory of all cultural landscapes within the National Park System that have historical significance. All LCS and CLI entries must be included in National Register documentation either as a countable resource (building, district, site, structure, or object) or as a historic associated feature.

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

nineteenth-century design with a horse head, fluted post, and ring with toggles and chain. Three Colonial Revival-style Roadside Lampposts (LCS No. 040516, historic associated features) are also extant: two located along the Belvedere Drive and one at the north side of the Mansion Parking Area. Each white-painted, turned wood post is approximately 5 ft high. The two on the Belvedere Drive have hexagonal metal and glass lamps, while the one at the Mansion Parking Area has an oversized, four-sided metal and glass lamp.

The original design for the Mansion terrace landscape dates to Copeland's 1869 plans as implemented by Frederick Billings, with Neoclassical and Arts and Crafts-inspired improvements from the late nineteenth century and an overlay of mid-twentieth-century improvements by the Rockefellers. Substantially intact components of the 1869 Copeland plan include the Lawn, established in the early 1870s; the Swale, established c. 1870; and the extant pedestrian paths, constructed c. 1873-1874. The Rockefellers converted the Swale, historically maintained as a meadow, to a manicured lawn between 1968 and 1976. Later alterations included the construction of the Secondary Entrance Drive and associated plantings in 1978. Both pedestrian paths have been altered slightly. The Mansion-Flower Garden Walk initially led to the greenhouse complex. When the Flower Garden was built in 1894-1895, a 35-ft-long section between the Flower Garden and the Summer Houses Path replaced the 200-ft-long section between the Mansion and greenhouses. The current sweeping alignment dates to 1901. The Summer Houses Path, originally surfaced in gravel and lined with stone drainage ditches, served historically as the primary pedestrian entrance to the grounds and linked River Street with the Mansion. Above the Upper Summer House, the path forked into two branches. The west fork was removed c. 1901, and the east fork c. 1956. The Billings family installed the Hitching Post on the property c. 1895; the National Park Service moved it approximately 5 ft south of its historic position in 1998-1999. The three historic Roadside Lampposts are Rockefeller-era (late 1950s), with a design attributed to Muller. The Park Service added six other compatible lampposts on the property in 1998-1999, each 9 ft in height.

The Upper Summer House (LCS No. 040528, contributing structure), built c. 1874, and the Lower Summer House (LCS No. 040526, contributing structure), built c. 1875, are both 10-ft-square frame pavilions constructed in a rustic Adirondack style with copper roofs, twig siding, and rough cedar trunks and branches for trim. The Upper Summer House is sited at the top of the path from River Street and has open windows on the south and west sides and arched passages on the north and east. The walls are clad in twigs set in herringbone patterns and nailed to planks. An L-shaped stone wall forms a level terrace for the structure. Built c. 1877 of dry-laid stones, typically smaller than those in the perimeter wall, the Upper Summer House Stone Wall (LCS No. none, historic associated feature) measures 40 ft long on the south side and 14 ft on the east. It incorporates a set of seven stone steps on the path leading to the Lower Summer House and supports an iron fence. The fence consists of two sections, one 38 ft long and the other 27 ft long, with ornate black-painted cast-iron posts spanned by panels of simple wrought-iron straps set in diagonal patterns. The Lower Summer House is built of four wood piers set on raised dry-laid stone walls enclosing a set of stone stairs in the perimeter stone wall. The north piers are shorter than the south ones, reflecting a change in the level of the wall. The piers are clad in twigs set in a herringbone pattern and have rough cedar-trunk corners. Architect Detlef Lienau may have prepared the designs for the two summer houses. Vines historically covered the structures, surrounded by naturalistic shrubs, and gas lanterns lit the interiors. The copper roofs replaced the original twig roofs in 1887. Repairs to the structures in 1995 included the replacement of twig detailing on both and the outside southwest corner post of the upper one. More recently the National Park Service replaced the copper gutter on the Upper Summer House, rebuilt the stone wall bordering it and repainted the iron fence, and re-soldered the copper roofs and replaced additional rotten twig detailing on both structures.

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

A <u>Tennis Court (LCS No. 040539, contributing structure)</u> is located north of the Main Entrance Drive along Elm Street on the site of the first Marsh house. The single concrete-surfaced court measures 120 ft by 58 ft and has a removable net set on steel posts painted green. An 8-ft-high, green-painted, Cyclone steel fence surrounds the court on three and a half sides, with a 40-ft opening on the west side and ball finials on the fence posts. Copeland set aside the site in his 1869 plans as a croquet ground. By July 1887, the Billings family converted it into a court for lawn tennis with a 6-ft-high wood and wire fence. The current court dates to c. 1930, when the family updated it to standard court size.

A 3-ft-high Perimeter Stone Wall (LCS No. 040517, contributing structure) borders the Mansion terrace along River and Elm streets and extends outside the District boundary to the former gardener's cottage on North Street. The dry-laid, rubble-course wall built of native rock without coping stones measures on average 3 ft wide and serves as a retaining wall except for approximately 300 ft of free-standing wall adjoining the Stable Drive. It includes a small secondary wall above the main wall at the Main Entrance Drive and a separate section in the triangular island. Openings in the wall are located at the Lower Summer House, the Main Entrance Drive, the Stable Drive, a path opposite River Road, and a drive near the Village of Woodstock boundary on Route 12. Frederick Billings constructed the perimeter wall between 1869 and c. 1878, possibly using remnants of a pasture wall from the Marsh era for portions of it. Sections were reset in 1912 to accommodate the widening of the Main Entrance Drive, and a section opposite River Road was rebuilt in 1999.

A complex of four interconnected buildings constructed between 1872 and c. 1958 occupies the terrace west of the Mansion. The <u>Belvedere (LCS No. 040519, contributing building)</u> is the easternmost building in the complex. The <u>Bowling Alley (LCS No. 040542, contributing building)</u> extends west from the rear (west) elevation of the Belvedere. The <u>Greenhouse (LCS No. 040524, contributing building)</u> is attached to the south wall of the Bowling Alley, and the <u>Garden Workshop (LCS No. 040527, contributing building)</u> is attached to the west end of the Greenhouse and Bowling Alley. The entire complex is painted a bright white color.

The Belvedere is a two-story, frame, octagonal building measuring approximately 35 ft long by 22 ft wide with a two-story porch on the facade (east) elevation. Expansive views to the east and south are possible from the building, which has a low-profile, cruciform-shape, cross-gable roof with wide overhanging bracketed eaves. The roof is clad in standing-seam copper, and a large brick chimney rises from the north gable. The first-story walls are clad in horizontal flush-board siding; the second story features board-andbatten siding. Intricate brackets and fanciful scrollwork detailing, characteristic of the Swiss chalet style, adorn the exterior. The building has a rubble-stone foundation below grade and brick above grade. Paired two-panel doors with a four-light transom are centered in the facade, with paired six-light French doors above opening onto the second-story porch. Additional entrances consist of a single door at the west end of the south elevation that opens onto the Swimming Pool terrace and a single door near the west end of the north elevation. Both doors are wood with four glazed lights over a single wood panel. The angled northwest, northeast, and southeast corners of the building have two-over-two double-hung windows at the first story. The south elevation features two large, nine-light, triple-hung windows, added in 1962-1964, with scrollwork balcony-like detailing below the sills and a fixed three-light window high above the door. Additional two-over-two windows are symmetrically placed at the second story in the south and west elevations, and the north elevation has two second-story, one-over-one windows. The interior of the Belvedere contains Laurance Rockefeller's study and a small bathroom on the second floor, an entrance vestibule and living room on the first floor, and two changing/bathrooms in the basement. The stairway to the basement is located just inside the south entrance from the Swimming Pool, and a two-flight staircase leads to the second floor from the north entrance vestibule.

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

The one-story, brick Bowling Alley measures 17 ft wide by 105 ft long, with a one-story attached shed at the west end. The low-pitched shed roofs have membrane surfaces, and the foundation is rubble stone and poured concrete below grade with brick above grade. The building is accessed from the other buildings in the complex. Two padded swinging doors ornamented with split and mounted Billings-era candlepins open into it from the north vestibule of the Belvedere; and a single wood door at the east end of the south wall, with two-light glazing over a single panel, leads to the Greenhouse. An oversized door designed to allow the insertion of the bowling alley pin return machinery into the building is located at the west end of the north elevation, and a second oversized door is located in the west wall of the attached shed. The shed also has a wood door with nine-light glazing above three wood panels that opens from the south wall into the Garden Workshop. The simple exterior features a single one-over-one double-hung window at the east end of the north elevation and seven two-over-two windows evenly spaced along the rest of the north wall, a pair of four-light fixed windows at the basement level of the west wing's north wall, a fixed threelight sash above novelty siding at the east end of the south wall and four four-light hopper windows evenly spaced along the rest of the south wall. A walnut-finished bowling alley with two candlepin lanes runs the length of the Bowling Alley's first floor. The alley is outfitted with automatic AMF Pinsetters bowling equipment, including a pinsetter machine, ball return with scoring table, lane gutters and raised approach, and modern lighting (hidden by scalloped vertical ceiling boards). A partition above the pinsetter screens the AMF mechanism from view and creates a separate space on the west end of the bowling alley accessed via walkways flanking the bowling lanes. A small kitchen/ice cream bar with built-in cabinets, shelves, soda fountain unit, and bar-height counter and a place for tables and chairs, is located at the east end of the bowling alley.

The cellar under the Bowling Alley contains a fallout shelter system similar in design to the one beneath the Mansion. The main shelter was designed to hold 38 people, and a smaller pre-fabricated metal tank shelter at the sub-basement level to the east of the Belvedere porch could accommodate eight more. The shelters include basic kitchen and bathroom facilities, bunks, and storage areas for survival supplies. The main shelter is equipped with paired sets of bunks, two on the top and two on the bottom, lining one wall. Its air intake is through the Greenhouse. The tank shelter is accessed by a passage connected to the Swimming Pool filter room. A single escape hatch, identical to those on the Mansion lawn, is located on the small grass lawn outside the Belvedere's main entrance. Similar to the tank shelters under the Mansion lawn, the Belvedere tank shelter contains eight bunks, storage space for food, toilets, and an emergency source of water.

The Greenhouse, initially part of a U-shaped greenhouse range and originally known as the Grapery, measures 104 ft 6 inches long by 15 ft 3 inches wide. The rectilinear-eave, half-span, iron-frame superstructure has a modular design composed of 12 standard-size bays and one shorter bay at the east end. A low brick foundation wall with granite piers supports the south side of the superstructure. The two end walls, a center partition wall, the south knee walls, and the roof are constructed of overlapping sheets of plate glass supported by wood bars. A low brick wall runs along the interior of the east end wall. Each bay is divided into six lights, with a wood top-hinged window sash in each knee wall and roof bay. Wood-framed doorways in the west end wall (leading into the Garden Workshop) and the center partition wall contain wood doors glazed with four lights over two wood panels. The Greenhouse has a pea gravel floor.

The Garden Workshop is a 25 ft by 35 ft, one-and-one-half-story frame building designed to coordinate with the other buildings in the complex. It has a gable roof covered with standing-seam sheet metal, horizontal flush-board siding at the first-story level and vertical board-and-batten siding at the loft level, and a poured concrete foundation. The west elevation contains an articulated garage door with two small lights adjacent to a single wood door glazed with nine lights over three wood panels. A paneled triple

Marsh-Billings-Rockefeller National Historical Park Name of Property

Windsor County, VT County and State

door is centered in the loft level. The other entrances to the building lead from the shed at the west end of the Bowling Alley into the north elevation and from the west end of the Greenhouse into the north side of the east elevation. Two-over-two double-hung windows are located in the north and south first-story elevations, and a three-light window is centered in the loft level of the east elevation. The interior finishes include the exposed brick and glass walls of the two adjacent buildings as well as varnished tongue-and-groove paneling and painted ceilings.

Architect Detlef Lienau designed the original Belvedere complex, built for Frederick Billings between 1872 and 1874, consisting of the Belvedere, Bowling Alley, Greenhouse, and several other greenhouses that were torn down in 1930. Lord's Horticultural Works manufactured and erected the original 1872–1874 greenhouses. In 1902–1903, Lord & Burnham replaced the original curved-eave, half-span, wood-frame superstructure on the Greenhouse with the current superstructure, which is set on a portion of the 1872–1874 foundation wall. Architect Theodor Muller designed renovations to the complex for the Rockefellers that included the addition of the Garden Workshop c. 1958 and 1962–1964 alterations to the interior of the Belvedere and Bowling Alley. The brick wall at the east end of the Greenhouse likely dates to Muller's renovations, which also included the windows in the south elevation of the Belvedere and the installation of the fallout shelter system beneath the complex. The Belvedere tank shelter suffered severe water damage in the early 1980s; considered uninhabitable, it was emptied of its contents and abandoned. The National Park Service performed mold mitigation on the entire Belvedere fallout shelter system in 2007 and 2014. The Belvedere and Bowling Alley remain furnished as they were in 1998 and are open to the public. The Garden Workshop and Greenhouse remain in active use for gardening operations.

The Swimming Pool (LCS No. 040540, contributing structure) extends from the south side of the Belvedere to cover the site formerly occupied by two of the four original Billings greenhouses, the Tropical House and the Octagon. The concrete pool has a rectangular north section (22 ft wide by 40 ft long) that opens into the 25-ft-square octagonal south end, reflecting the shapes of the removed greenhouse buildings. A 2- to 3-ft-wide concrete walk surrounds the pool, and the inside walls are painted bright blue. The Hegeman-Harris Company of Boston built the pool in 1930–1931. Alterations in 1959 consisted of reducing the depth and installing lights, filtration, and chlorination systems. The pool is filled with water from May through October but is no longer used for swimming.

The swimming pool is situated on an elevated Pool Terrace (LCS No. none, contributing site), largely open on three sides, that is supported by a 5-ft-high, battered, dry-laid, random-coursed stone Pool Terrace Wall (LCS No. none, historic associated feature) without coping that conceals the outer walls of the pool. The wall extends 35 ft along the east side, 65 ft along the south side, and 15 ft along the west side due to a rise in grade. The 3-ft-high, black-painted Pool Terrace Railing (LCS No. none, historic associated feature) along the top of the wall has square welded-steel pickets and posts and a continuous railing with scrolled returns at either end. The Pool Patio Brick Walls and Barbeque (LCS No. none, historic associated feature) partially enclose the north end of the pool terrace. A 40-ft-long section of brick wall with a sloping profile runs directly along the west edge of the pool, retaining the adjacent Cutting Garden and covering the lower part of the east Greenhouse wall. Brick facing continues along the foundation of the Belvedere at the north edge of the pool and adjoins at an angle another 40-ft-long section of brick wall, 5 ft in height, that incorporates a two-bay barbeque along the east portion. An irregular 12 ft by 20 ft Pool Patio (LCS No. none, historic associated feature) between the pool and the barbecue is paved in irregular-coursed Catskill bluestone. Four sets of Pool Terrace Steps (LCS No. none, historic associated feature) with stone treads and risers extend for 90 ft along the east side of the pool terrace from the Belvedere lawn down to the Long Terrace. The uppermost steps are 10 ft wide with two sets of five treads. A small stone landing separates them from the second set of steps, which are 5 ft wide and access the adjoining lawn. The two lower sets of steps are 7 ft wide and abut the pool terrace

Marsh-Billings-Rockefeller National Historical Park Name of Property

Windsor County, VT County and State

wall. A <u>Sundial Base (LCS No. none, historic associated feature)</u> is located on the middle landing of the upper steps. The base consists of a 3-ft-high, 18-in-diameter gray granite table with a polished round top and a single unpolished triangular-shaped leg. A replica of the original bronze sundial in the form of a sailboat is removed annually for winter storage. Four <u>Pool Terrace Rock Gardens (LCS No. none, historic associated features)</u> border the pool terrace steps. The largest rock garden along the upper steps incorporates a pre-existing rock outcropping, while the others contain introduced rocks. All are maintained with informal and naturalistic plantings, dwarf evergreens, and flowering alpine plants. The Rockefellers added the pool terrace, designed by Theodor Muller and landscape designer Zenon Schreiber in 1957 and completed by 1962, and moved the sundial base to its current location from the main walk of the Long Terrace. It had been installed in 1896 at the center of the Flower Garden as a temporary placeholder for the Italian Fountain and relocated c. 1899 to the Long Terrace. Schreiber designed and maintained the rock gardens for the Rockefellers between c. 1962 and c. 1987.

The <u>Cutting Garden (LCS No. none, contributing site)</u> is an approximately 75 ft by 13 ft area west of the swimming pool and adjacent to the Greenhouse. It contains a variety of annual flowering herbaceous plants organized in beds defined by thirteen 14 ft by 2 ft bluestone <u>Cutting Garden Walks (LCS No. none, historic associated feature)</u> running perpendicular to the Greenhouse. A large yew hedge forms the east edge of the garden, adjoining the pool terrace. The Billings family initially established the garden in 1930; the Rockefellers planted the yew hedge c. 1962 and altered the garden to its present dimensions c. 1967–1968.

The <u>Putting Green (LCS No. none, contributing site)</u> consists of an oval-shaped turf (75 ft long by 14 ft wide) at the center of an open, 130 ft by 25 ft lawn below the Cutting Garden, west of the pool terrace. The green features nine holes marked by numbered inverted red plastic cups on steel stakes. A low <u>Putting Green Wall (LCS No. none, historic associated feature)</u>, approximately 2 ft high and 120 ft long, built of dry-laid random-coursed cut stone without coping defines the north edge of the site adjoining the Cutting Garden. A flight of three stone steps is built into the east end of the wall, and a set of three stone steps is cantilevered out from the middle of the wall. Two <u>Putting Green Rock Gardens</u> (<u>LCS No. none, historic associated features</u>) add texture at the end of the Putting Green wall. Robert Trent Jones designed the Putting Green, built c. 1968 for the Rockefellers, and Zenon Schreiber designed and maintained the rock gardens between c. 1962 and c. 1987.

The Flower Garden (LCS No. 040514, contributing site), aka Foursquare Garden, is an approximately 60-ft-square, partially enclosed space sited on level ground below the Belvedere complex and pool terrace. The Flower Garden Retaining Wall (LCS No. none, historic associated feature) is built into the slope along the north and west sides of the garden. Constructed of dry-laid random-coursed cut stones with large coping stones, the wall slopes from ground level at the southwest corner to a height of 4 ft parallel with the adjoining bank, interrupted by steps, then continues along the north side and steps down to 3 ft at the east end, where it terminates in a flight of steps. A 2-ft-high yew hedge defines the east side of the garden, and mature hemlock with an open understory forms the south edge. The Flower Garden Walks and Steps (LCS No. none, historic associated feature) consist of several gravel walks and gray stone steps. The walks are 4 ft wide with nearly flush stone edging and divide the garden internally into a quincunx plan, with a perimeter walk and two cross-axis walks meeting at the center. The main entrance to the garden is at the east end of the east-west axis, where two flights of 5-ft-wide steps with blackpainted steel railings lead up from the Mansion lawn through the yew hedge. A single flight of identical steps at the west end leads up through the stone wall to the adjacent Long Terrace. The steps at the northeast corner of the garden are only 3 ft wide and do not have a railing. Gray stone Flower Garden Benches (LCS No. none, historic associated feature) are located within the perimeter beds at either end of the north-south cross-axis walk, in front of small patios created by the concave intersection of the

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

walks. The benches have 8-ft-long by 18-ft-deep rectangular seats supported by three stone-slab legs with urn-shaped profiles. The <u>Italian Fountain (LCS No. none, contributing object)</u> at the center of the garden consists of a 4-ft-high antique white-marble fountain with a 3-ft-diameter bowl set on a baluster column and square plinth. Water spurts from the center of the bowl and cascades over the edges into a 7-ft-diameter basin of Vermont white marble. The flower beds are maintained with a wide variety of annual and perennial flowering herbaceous plants designed in an informal manner, roughly symmetrical with respect to the center fountain. The beds in the south half are planted with shade-tolerant material. Those bordering the stone wall contain a variety of standard and tree hybrid tea roses, and the bed along the south edge is grass with naturalized ferns extending down the slope. Four small <u>Flower Garden Rock Gardens (LCS No. none, historic associated features)</u> line the north side of the Flower Garden.

The Long Terrace (LCS No. none, contributing site) is a 400-ft-long, 40-ft-wide open space west of the Flower Garden composed of two 4-ft-high stepped grass terraces. The Long Terrace Walks and Steps (LCS No. none, historic associated feature) consist of a 75-ft-long section of gravel walk with stone edging that extends west from the Flower Garden along the south edge of the lower terrace and a 36-ftlong stone-paved walk at the west end of the terrace that ascends the slope via two 5-ft-wide flights of stone steps. A naturalized fern bed lines the south side of the east-west walk, and a 6-ft-wide bed along the north side is planted with bush and tree-form hybrid tea roses. The walk ends at a hemlock hedge that continues along the south edge of the terrace. A second hemlock hedge and the stone wall of the pool terrace define the north edge of the Long Terrace. Tall evergreen trees at the west end of the Long Terrace frame an axial vista of Mount Tom's south peak that is now partly obscured by the growth of conifers to the west and south. The Neoclassical-style Long Terrace Bench (LCS No. none, contributing object) is located in the heavy shade of the mature white pine and hemlock grove at the west end of the upper terrace, on an original herringbone-pattern brick surface edged in gray stone. The white-painted wood bench measures approximately 10 ft wide by 5 ft high and features a U-shaped footprint, curved seat, volute arms, and corner piers. At the east end of the upper terrace, directly opposite the pool terrace steps, the Baigneuse Drapée (The Seine) Sculpture (LCS No. none, contributing object), a 5-ft-tall bronze female nude, is set on a 1-ft-high rough-cut marble pedestal and faces north.

Charles A. Platt designed the Neoclassical Revival-style Flower Garden and Long Terrace, built between 1894 and 1899 for the Billings family. He also designed the basin for the Italian Fountain, which was fabricated by the Vermont Marble Company of Rutland and installed in 1899, and two benches installed c. 1898 as focal points on the Long Terrace. The current Long Terrace Bench is a 1999 reconstruction of one of the benches, built using the original Platt plans. The designer for the Flower Garden Benches is unknown. Between 1912 and 1913, Platt's student Ellen Biddle Shipman redesigned the flowerbeds in the Flower Garden and Long Terrace. The Rockefellers altered the two gardens c. 1955, removing perimeter hedges and border hedges that originally surrounded the beds in the Flower Garden and hedges within the Long Terrace. They also removed portions of the circulation features on the Long Terrace (the central walk along the upper terrace and additional cross-axis walks with steps) and added the yew hedge at the east edge of the Flower Garden and the rose bed along the north side of the east-west Long Terrace walk. When the pool terrace was built in 1961–1962, the Rockefellers installed the bronze sculpture, one of six casts produced c. 1921 of the piece by the French sculptor Aristide Maillol (1861–1944), on the Long Terrace. Zenon Schreiber designed and maintained the Flower Garden Rock Gardens for the Rockefellers between c. 1962 and c. 1987. The stair railings in the Flower Garden date to c. 1998.

Hill

The primarily forested hill is steeply sloped along the north, east, and south sides, averaging 30 to 40 percent grades, but reaching over 70 percent above the Belvedere. The hill plateaus at the Upper Meadow,

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

where the elevation averages between 816 and 825 feet. The forested portions of the hill include an old-growth deciduous woodlot and oak grove from the Marsh era and mature plantations established by Frederick Billings beginning c. 1874 on the steep hillside north of the Belvedere. The plantations are characterized by Norway spruce, hemlock, white pine, and sugar maple. Most are naturalized with native northern hardwoods except along the edges of open spaces. The Upper Meadow at the top of the hill is the largest open space; the Bungalow clearing and Woodshed yard form ancillary open spaces on the northern slope. The hillside gardens (the Fernery and Lily Pond Garden) form a loosely defined space within the raised canopy of the forest plantations on the east and south slopes of the hill, closest to the Mansion. The Bungalow, Horse Shed, Woodshed, Reservoir, and several non-contributing buildings are scattered throughout the hill, connected via several pedestrian paths and components of the estate drive system (described in the subsequent section).

The <u>Upper Meadow (LCS No. none, contributing site)</u>, a rectangular open space at the level top of the hill, measures approximately 350 ft by 250 ft with a 150-ft-square extension at the southeast corner and is bisected north to south by the Upper Meadow Through-Road. Mature plantations of Norway spruce, white pine, and mixed deciduous/coniferous woods border the meadow; and scattered trees and shrubs grow in the north end. The Billings established a kitchen garden in this space c. 1870, and the Rockefellers converted it to a horse pasture c. 1961 with a small fenced-in garden plot on the south half. The meadow was not used as a pasture or garden after c. 1995; lumber is dried in the southeast corner.

The Horse Shed (LCS No. 040525, contributing building), or Pony Shed, is a one-story frame building located near the southwest corner of the Upper Meadow, adjacent to the Upper Meadow Road. The Colonial Revival-style utilitarian building measures 40 ft long by 18 ft wide and has an uneven-span gable roof with a ventilating cupola topped by a weathervane. The exterior walls are clad in unpainted wood shingles, and the foundation is concrete. Sliding doors fill the original three open stalls that lined the north elevation, and the building has several multi-paned windows. The four-rail, split-rail Upper Meadow Corral Fence (LCS No. none, historic associated feature) encloses a 70 ft by 32 ft horse corral off the north side of the building within the meadow and includes a set of split-rail gates on the north side and at the southeast corner of the corral. Architect Theodor Muller designed the c. 1961 building as a stable for Mary French Rockefeller's horses. The National Park Service renovated it recently for use as an artist-in-residence studio. The fence, also built c. 1961, is the only remnant of a more extensive fence that lined the meadow's perimeter.

Four <u>Maintenance Sheds (LCS Nos. none, non-contributing buildings)</u> built in late 2013 are located across the meadow from the Horse Shed. Three of the sheds are connected; the fourth is oriented perpendicular to the others. The sheds are approximately 8 ft deep and vary in width. They are constructed of vertical slat wood, have vertical slat sliding doors across the front, and shed roofs topped with EPDM (ethylene propylene diene monomer) membranes.

The <u>Upper Hillside Path (LCS No. none, contributing structure)</u> begins in a Norway spruce plantation at the southeast corner of the Upper Meadow and follows the steep southern and eastern rim of the hill to the Fernery and beyond it to the north. The earthen path continues across Wood Drive and turns 90 degrees to end at the Bungalow clearing. It features log steps, retaining stone slabs, and a steel-chain railing along the steepest portion. A <u>Brownstone Bench (LCS No. 040518, contributing object)</u> is banked into the hillside west of the path, 60 ft north of the Fernery. The bench is 3 ft 9 inches wide, 1 ft 10 inches deep, and 2 ft high; features curved sides that rise to the height of the back; and is covered with lichens and moss. The Billings family built the path c. 1897–1899, added the bench c. 1899, and extended the path to the Bungalow c. 1917. The chain railing was installed c. 1980.

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

The Reservoir (LCS No. 040529, contributing structure) is located within a naturalized white pine plantation near the top of the hill. Built in 1907 and remodeled in 1919, the low, 25-ft-square, wood-frame superstructure shelters an abandoned concrete cistern. It has an asphalt-shingled gable roof, blue-painted novelty siding in the gable ends, and a concrete foundation.

The Fernery (LCS No. 040513, contributing site), aka Waterfall Garden, is located on the rocky, steep, forested hillside north of the Belvedere. Measuring approximately 120 ft by 80 ft, it contains a variety of herbaceous woodland plants and mosses located in a naturalistic manner with no distinct beds. The Fernery Watercourse (LCS No. none, historic associated feature) consists of a series of four naturalistic pools and three subtle waterfalls or rills that extend for an overall distance of 80 ft. Artificially supplied with water from the Pogue between May and October, the watercourse begins at an elevation of 812 ft in a hidden source beneath rocks that empties into a small pool, 6 ft in diameter. A rill from this pool runs across rocks into a second pool, 12 ft by 5 ft, that empties into an outlet carrying the water beneath the ground to the top of a large rock outcropping, over which the water cascades into a third pool, 10 ft by 6 ft and lined by vertical wood stakes. This pool empties into an outlet that carries the water underground to the top of a larger rock outcropping, from where it cascades down into the fourth and largest pool, measuring 15 ft by 10 ft and bordered by stone ledges. The final pool empties into a steep channel leading to a grate-covered outlet at 788 ft. All four pools are lined with concrete. The Fernery Path (LCS No. none, historic associated feature) rises 30 ft in elevation over a length of 250 ft from Wood Drive through the Fernery. It crosses the watercourse four times, winds around trees and rock outcroppings, and ascends ten sets of log- and stone-riser steps. The path continues west of the Fernery for 150 ft through a mature oak grove and ends at the east side of the Upper Meadow. It has a number of branches, shortcuts, and spurs within the Fernery, and much of its surface is bordered by moss. Elizabeth Billings began working on the Fernery c. 1893, when the path was built. She added the watercourse and altered the path c. 1897. The Rockefeller family had the watercourse rebuilt and the path altered between 1966 and 1969.

The Lily Pond Garden (LCS No. none, contributing site) is located on the east slope of the hill within an old-growth Norway spruce plantation. The approximately 80 ft by 40 ft garden of ferns and woodland plants surrounds the Lily Pond (LCS No. none, historic associated feature), an artificially fed water feature 3 ft deep with an irregular shape measuring approximately 50 ft by 25 ft. The inconspicuous Lily Pond Dam (LCS No. none, historic associated feature), approximately 45 ft long, is located along the east (downhill) side of the pond. The exposed top half of the dam is built of mortared rubble partly surfaced in concrete; the rest is covered by earth and/or plant material. The Lily Pond Path (LCS No. none, historic associated feature), a 200-ft-long earthen path, begins at a stone staircase built into the stone wall at the Mansion parking area and rises 40 ft in elevation along two switchbacks to the Lily Pond Garden. The staircase, constructed of cut stone treads and risers and large single-slab stone sidewalls, has one landing between two sets of five treads. The path incorporates six more sets of steps, built of log or stone risers with earthen treads. It follows the perimeter of the pond and crosses the Lily Pond Lower Waterfall Bridge (LCS No. none, historic associated feature) over the inlet, then branches to the south toward Wood Drive and the Fernery. The stone slab bridge, built of rough-cut dark metamorphic rock, measures 10 inches thick, 3 ft 2 inches wide, and 13 ft long. The Lily Pond Waterfall (LCS No. none, historic associated feature) extends northwest for 50 ft from the northwest part of the pond. The water surfaces at the top of a large rock outcropping and cascades over rock for 20 ft, then enters a 20-ft-long gorge that drops 8 ft in elevation, lined by large rocks with vertical strata that supplement the native outcropping. The earthen Lily Pond Waterfall Path (LCS No. none, historic associated feature) follows the course of the waterfall and rises 16 ft in elevation over a length of 80 ft from the pond to Wood Drive. It borders the lower limit of the rock outcropping and crosses the waterfall gorge on the Lily Pond Upper Waterfall Bridge (LCS No. none, historic associated feature), another stone slab bridge,

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

3 inches thick, 2 ft 6 inches wide, and 6 ft 6 inches long. The path then ascends a set of 12 steps consisting of stone risers and earthen treads. Frederick Billings constructed the dam and lily pond c. 1885 as two connected ponds, with the path and lower bridge. Elizabeth Billings expanded the inlet at the northwest part of the pond c. 1901 into the waterfall and built the waterfall path and upper bridge. In 1913, the Billings family altered the Lily Pond path and replaced the south pond with a swimming pool that was capped in 1931. The pond and waterfall are fed continuously from the Pogue between May and October.

The earthen Arboretum Path (LCS No. none, contributing structure), built in 1899, extends north from the Lily Pond path and follows an 800 ft contour around the forested north rim of the hill to meet Wood Drive near the northeast corner of the Upper Meadow. The path leads through the remnants of an arboretum maintained from c. 1900 to c. 1944.

The 80-ft-square <u>Bungalow Clearing (LCS No. none, contributing site)</u> is a short-cut meadow within a mature white pine plantation on the northern edge of the hill north of Wood Drive and the hillside gardens. The clearing has no shrubs or specimen trees and extends along two hillside vista clearings, each 100 ft by 30ft, to the northwest and northeast.

The one-story, wood-frame Bungalow (LCS No. 040520, contributing building) at the southern edge of the clearing faces north toward the vistas to the surrounding hills. The Craftsman-style square building has a low-slung flared hipped roof with a tower-like monitor (or clerestory), wood roof shingles and cedar clapboard siding finished in natural colors, a concrete foundation, and a deep full-width porch across the north elevation. An engaged stone chimney is centered on the clerestory's rear (south) elevation. The main entrance is a pair of ten-light French doors centered in the wide central bay of the facade (north) elevation. Slightly projecting bays at each end of the facade feature half-glass doors that open to sleeping porches. Windows consist of triple, paired, and single casements with six, eight, or twelve lights. Craftsman-style elements on the front porch include brackets at the top of the square posts and under the wide flat railings, wood benches between the posts, and a floor of bricks laid in a herringbone pattern with granite block trim at the outer edges. The front door opens directly into a large central living room lit by the tall clerestory, which features a geometrically patterned wooden ceiling. The fireplace is centered in the south wall, and the kitchen is located behind the chimney. Bedrooms and bathrooms on either side of the living room all have angled exposed roof beams and wood-sheathed ceilings, paneled walls, board-and-batten doors, and built-in cabinets.

Architect H. Van Buren Magonigle designed the Bungalow, constructed in 1917, as a guest house and family retreat for Mary Montagu Billings French. Theodor Muller designed minor renovations made for the Rockefellers in the 1960s that included combining the original sleeping porch on the west side of the building with the adjacent bedroom and hall to create a large master bedroom. Today, the building is reserved for special meetings and workshops and remains furnished as the Rockefeller family left it, containing many items that the couple inherited from Laurance's parents' summer cottage in Seal Harbor, Maine (the Eyrie, demolished in 1962); items from Laurance and Mary Rockefellers' house in Tarrytown, New York; and mementoes of the couple's travels.

The short-cut grass <u>Woodshed Yard (LCS No. none, contributing site)</u> is located at the eastern end of the level terrace above Route 12, on the north slope of the hill. Mature coniferous and deciduous forests define the perimeter of the triangular clearing that has a maximum length of 275 ft and width of 150 ft.

The <u>Woodshed (LCS No. 040530, contributing structure)</u>, or Woodbarn, is banked perpendicular to the Pogue Carriage Drive (aka Mountain Road) at the southwest corner of the Woodshed yard. The one-and-

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

one-half-story frame building measures 100 ft long by 26 ft wide. It has a gable roof, shingle siding, and an open first floor. The Billings family enlarged the shed, built 1875–1876, c. 1900, extending the south end of the upper floor to the road and adding a bay to the north end. The National Park Service rehabilitated the building in 2008 and displays the museum's carriage collection on the upper floor.

The <u>Forest Center (LCS No. none, non-contributing building)</u> is located near the center of the yard and is oriented perpendicular to the Woodshed. The National Park Service constructed the building, designed by Steve Smith of the Burlington, Vermont, firm Smith, Alvarez, Sienkiewycz Architects, in 2007 using lumber harvested from the Mount Tom Forest. The one-story, rectangular frame building has a side-gable roof clad in standing-seam metal with a solar array, overhanging eaves, and exposed rafters. A square hip-roof cupola is centered on the roof ridge near the west end. The walls have wood shingles and wide board trim, and the building has a concrete slab foundation. The main entrance is located within a recessed porch at the west end of the facade (south) elevation. Boards of varying size cover the curved wall along the porch. The building has several multi-paned metal-frame windows and doors. A low stone wall runs along the east edge of a small flagstone terrace adjacent to the east side wall.

The <u>Path to the Thompson Place (LCS No. none, contributing structure)</u> extends north from the beginning of the Pogue Carriage Drive through a perimeter plantation of Norway spruce to an opening and steps in the perimeter wall opposite River Road. Established in the 1870s, the narrow earthen path is not actively used.

Circulation

The System of Estate Drives (LCS No. 040510, contributing structure) provides access to the Mansion Grounds from public streets and connects the auxiliary structures and buildings scattered across the Grounds to each other and to the System of Carriage Drives through the Forest. The formal entrance to the property, now closed to regular use, is the Main Entrance Drive (LCS No. 040510, historic associated feature). The curving earthen-gravel drive begins as two 100-ft-long sections off Elm Street that meet to form a triangular island then passes through the Main Entrance Gateway (LCS No. 040515, contributing structure), a set of stone gateposts on either side of the drive. Each gatepost consists of a granite pylon, 1 ft 8 inches square and approximately 7 ft 6 inches tall, with an electrified Neoclassicalstyle lantern at the top. The lanterns are black-painted urns, 2 ft 6 inches high, glazed with frosted glass and surmounted by ball finials. After passing through the gateposts, the drive ascends a gradual slope along a southward-leaning arc for 150 ft to terminate in a circular turn-around (80 ft in diameter) that passes beneath the porte-cochère on the north side of the Mansion. The drive is about 10 to 12 ft wide and bordered by lawn with no visible edging. Frederick Billings had the Main Entrance Drive built c. 1870 partly on the bed of the c. 1790 Marsh north lane as a curving drive that ended in a tear-drop-shaped loop. Also constructed c. 1870, the gateposts originally supported highly ornamented wrought-iron gates. The Billings family altered the drive in 1903-1904 according to a Neoclassical-style redesign by Martha Brookes Hutcheson and removed the iron gates. When the drive was widened in 1912, the gateposts were reset to 18 ft apart and the urn lanterns were added.

The <u>Stable Drive (LCS No. none</u>, historic associated feature) begins at Elm Street north of the Main Entrance Drive and extends west around the west side of the Stable to a T-intersection with the circular loop of the Main Entrance Drive. The earthen-gravel drive averages 15 ft wide, with a 25-ft pull-off at the north entrance to the Stable and a low stone retaining wall above the pull-off. Built c. 1870 as a service road, Martha Brookes Hutcheson redesigned the original Y-intersection with the Main Entrance Drive to

⁸ Hutcheson practiced landscape architecture under her maiden name, Martha Brookes Brown, but is generally known today by her married name.

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

the current configuration in 1903–1904. Further alterations in 1998–1999 converted the section leading to the south entrance of the Stable into a stone-paved walkway and added a 50-ft-long stone retaining wall off the northwest corner of the building.

The <u>Coachman's Cottage Drive</u> (LCS No. none, historic associated feature), a short earthen-gravel driveway measuring 120 ft long and 25 ft wide on average, branches off the Stable Drive to the Coachman's Cottage and the Garage. The Billings family extended the drive, originally built c. 1870 as 80 ft long and 12 ft wide, to its current dimensions when the Garage was constructed in 1908.

The <u>Secondary Entrance Drive (LCS No. none, historic associated feature)</u> extends southwest from the Stable Drive just above Elm Street along the swale east of the Stable to meet the Stable Drive farther south near the Main Entrance Drive. Low stone retaining walls around silver maple and hickory trees at the north end of the drive accommodate the change in grade. The 12-ft-wide, 260-ft-long gravel road, designed by Bryan J. Lynch for the Rockefellers and built in 1978, now serves as the primary vehicular and pedestrian access to the grounds.

The Mansion Parking Area (LCS No. none, historic associated feature) is located at the base of the hill directly behind (west of) the Main Entrance Drive circle and is used for staff and handicapped-visitor parking. The gravel-surfaced, unmarked area measures 66 ft by 20 ft and provides parking for about seven cars. A large shrub bed screens it to the north, and the Mansion Garage forms the south edge. The Mansion Parking Area Stone Wall (LCS No. none, historic associated feature) extends for 150 ft from the Mansion Garage north along the parking area and beneath the hillside Norway spruce plantation and averages between 4 and 5 ft high. Along the parking area it has more uniform long stones, while the section to the north has larger and rougher stones. The Rockefellers constructed the parking area c. 1956 on the former site of the Billings laundry building and partially rebuilt the adjacent c. 1870 stone wall on a slightly different alignment.

The <u>Belvedere Drive</u> (LCS No. none, historic associated feature) extends west from the south edge of the Mansion Parking Area for approximately 600 ft along the north side of the Belvedere and Bowling Alley and terminates in a circle at the west side of the Garden Workshop. The earthen-gravel drive, built c. 1872, is approximately 10 ft wide and passes through ornamental plantings of Norway spruce and Eastern hemlock added in 1882. The simple curving alignment at the east end of the drive dates to 1903–1904 and replaced a circle. The <u>Belvedere Drive Retaining Wall</u> (LCS No. none, historic associated feature), built c. 1872, is a 160-ft-long, dry-laid, random-coursed, cut-stone structure that follows the elevation of the slope adjoining the Belvedere Drive behind the Bowling Alley, ranging from 1 to 8 ft in height. From the western circle of the Belvedere Drive, the North Street Road (LCS No. none, historic associated feature) curves to the southwest for about 600 ft to a T-intersection with North Street. The road, built c. 1872 to connect the gardener's cottage (3 North Street) with the greenhouse complex, averages 8 ft wide with a gravel surface and grass median at the east end. The western 200 ft lies outside the District boundary and is mostly paved in asphalt.

The grass-covered <u>Wood Drive (LCS No. none, historic associated feature)</u> extends north from the Belvedere Drive up the shady wooded slope through a series of intimate, naturalistic hillside gardens composed of low-growing plants and small pools toward the Bungalow, where it curves 90 degrees to the west and terminates at the Upper Meadow Road. The section west of the Bungalow is maintained with a graded surface, while the section south of the Bungalow is on average 8 ft wide and has a turf and earthen surface. Two stone steps are located at the south end of the drive, adjoining the Belvedere Drive. The <u>Wood Drive Retaining Wall (LCS No. none, historic associated feature)</u> borders the west side of the drive for 130 ft between the Fernery and the Lily Pond Garden. The dry-laid rubble-stone wall is upwards

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

of 4 ft high; the stones are covered by moss and lichen and overgrown by ferns and other woodland plants. The rustic <u>Wood Drive Stone Stairway (LCS No. none, historic associated feature)</u> in the wall contains nine 30-ft-long steps bordered by stone sidewalls that follow a curving alignment to a <u>Stone Ledge Bench (LCS No. 040518, contributing object)</u> beneath a massive dead oak tree (or snag). The 17-ft-long bench has a 4-ft-high-ledge back and 18-inch-deep seat of cut stone with a rounded nosing. The seat is cantilevered out from the ledge and supported in part by a diagonal slab leg. The Arts and Crafts-inspired design of the drive and the adjacent stone wall, stairway, and bench, all built c. 1904, is attributed to Martha Brookes Hutcheson.

Forest

The approximately 521-acre Forest rises behind the Mansion Grounds and extends over Mount Tom to the west. The mature woodlands encompass forest plantations of single species and mixed forest stands that exhibit subtly different characteristics in the regularity of tree spacing and size, the height of the tree canopy, and the composition of the understory. In addition to the large stands of trees grown to maturity on the flanks of the mountain, many carefully selected by Billings, the forest contains many large legacy trees with massive, spreading lower branches, unusual for eastern second-growth woodlands. These include remnant old-growth trees that survived deforestation in the nineteenth century, such as red oak and some eastern hemlocks that are nearly 400 years old and sugar maples that date back to Charles Marsh and the earliest settlement on Mount Tom. Typical wolf trees, or legacy trees located in an open field or pasture that developed a distinctive wide spreading habit with no competition from other trees, in the District include sugar maple, white ash, eastern hemlock, and white pine. Several distinct pastures and hayfields, scenic views, and various man-made features add to the complexity and subtlety of the forest. Rows of trees, particularly sugar maples, line old farm roads and other roads or remain as remnants of hedgerows and fence lines. Together with old stone walls, the rows of trees reflect typical agricultural patterns found on the lower slopes of the Vermont piedmont in the mid-1800s. No buildings survive within the forest, but largely intact foundations from the former McKenzie farmhouse and barns remain on Prosper Road. The carriage drive system that winds up the mountain ties together the areas of different character. The diverse array of managed and natural landscapes surrounds the carriage roads with seasonally varying scenery and conveys a range of historic practices and ecological associations.

The Mount Tom Forest (LCS No. none, contributing site) corresponds to the managed forest established by Frederick Billings and his heirs from the early 1870s through the early 1950s and sustainably managed by Laurance and Mary Rockefeller through 1997 that illustrates the continuum of reforestation practice during those years. ¹⁰ It is divided into 53 forested stands (averaging 10.56 acres per stand) and several distinct pastures and hayfields. ¹¹ Naturally regenerated forest stands dominate the site, composing 63 percent of the forested land; plantations compose 26 percent of the site. The majority of these stands are mixed hardwoods (146 acres or 29 percent of the forested area). The plantation trees consist primarily of coniferous species, including Norway spruce and several species of pines. The wide variety of forest stands exhibit diverse spatial qualities ranging from an open understory and high canopy (intact conifer plantations and mature woodlots) to heavy undergrowth and mixed age structure (younger woodlots and naturalized plantations). Compared to other forests in the region, the Mount Tom Forest has a low amount of downed coarse woody debris, contributing to its park-like aesthetic.

⁹ Forest stands are contiguous groups of trees sufficiently uniform in age-class distribution, composition, and structure and growing on a site of sufficiently uniform quality to be a distinguishable unit.

¹⁰ A "managed forest" is any forest with defined geographical boundaries that is subject to human interaction.

¹¹ The following descriptions use the stand numbers and dates identified in Appendix D of the Forest Management Plan and Environmental Assessment for Marsh-Billings-Rockefeller NHP (NPS 2006a). Some of the dates are conjectural.

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

The 21 plantations within the Mount Tom Forest are varieties planted specifically in interests of scientific forest regeneration. Most of the coniferous species are placed on a grid, over time thinned to approximately 15 ft on diameter, regardless of the era in which they were set out. Their growth habits are products of the layout. Some of the conifers chosen were climate appropriate but would not be planted in modern forestry practice (like exotic Norway spruce and Scots pine). The existing plantation stands consist of the following forest types:

- A 6.82-acre European larch (Larix decidua)/mixed hardwood stand (Stand 1) planted in 1887 at the southeast corner of French Lot
- Two mixedwood stands: 5.4 acres planted in 1896–1897 between the Pogue Carriage Drive and Pogue Brook (Stand 40) and 2.0 acres planted in the 1880s west of the Woodshed yard (Stand 43)
- A 1.6-acre mixedwood/apple stand (Stand 12) planted between the 1890s and 1940s in the far southwest corner of the District
- Four Norway spruce (*Picea abies*) stands: 4.3 acres planted in 1887 flanking the French Lot (Stands 3a-3b); 4.4 acres planted in 1950 south of McKenzie Road near the west edge of the District (Stand 13); and 1.4 acres planted in 1913 between the Pogue Loop and the North Ridge Loop (Stand 28)
- A 3.95-acre Norway spruce/mixedwood stand (Stand 27) planted in 1896 near the west end of the North Ridge Loop
- Three red pine (*Pinus resinosa*) stands: 16.3 acres planted in 1952 on the south side of the Elm Lot (Stand 4); 21.0 acres planted in 1917 north of McKenzie Road near the west edge of the District (Stand 17); and 6.5 acres planted in 1917 along the northwest side of the North Ridge Loop (Stand 26)
- Two Scots pine (*Pinus sylvestris*) stands: 1.6 acres planted in 1917 north of McKenzie Road near
 the west edge of the District (Stand 16) and 2.1 acres planted in 1930 along the northwest edge of
 the District (Stand 22)
- A 1.9-acre Scots pine/mixedwood stand (Stand 25) planted in 1917 along the northwest side of the North Ridge Loop
- Three white pine (*Pinus strobus*) stands: 22.2 acres planted in 1905 on the south side of McKenzie Road (Stand 18) and 4.8 acres planted around the Maple Grove Loop in 1911 (Stands 35a-b)
- A 15.93-acre white pine/mixedwood stand (Stand 45) planted in the 1880s adjacent to the Spur to Cemetery from the Upper Meadow Road
- Two white pine/Norway spruce stands: 10.2 acres planted in 1887 bordering the east side of the French Lot (Stand 2) and 3.8 acres planted in 1911 along the north end of the Lower Woodshed Road (Stand 41)

The earliest plantations, set out through the 1910s, retain sufficient materials and elements to reflect the original planting patterns and illustrate pioneering reforestation practices from that period. Those set out between 1910 and 1954 retain characteristics related to the forestry practices of the period and the continuum of reforestation work undertaken on the estate through the 1950s. Several of the later ones represent the only completely intact plantations within the forest. All exhibit evidence of continual thinning and management. Some of the oldest plantations (specifically, Stands 2, 40, 43, and 45) are beginning to develop late-successional stand characteristics notable for their complex vertical structure, including a diversity of tree ages and sizes.

Natural forest succession has filled in much of the land between the plantations with mixed hardwoods and other species. The distribution of tree species and age classes within the patchwork of forest stands

Marsh-Billings-Rockefeller National Historical Park Name of Property

Windsor County, VT County and State

illustrates the continuity of forest management for almost 150 years. The 32 naturally regenerated forest stands consist of remnant hardwood stands from managed woodlots of the Marsh period; regenerated stands that began to grow in abandoned agricultural fields about 50 to 60 years ago; scattered, large old trees within remnants of marginal wetlands and riparian areas that were never cultivated; and remnants of former homestead plantings (apple trees, sugar maples, and locusts) scattered among early-successional hardwoods. The naturally regenerated stands in the Mount Tom Forest consist of the following forest types:

- A 14.82-acre American beech (Fagus grandifolia)/sugar maple (Acer saccharum) stand (Stand 33) at the east end of the North Ridge, dating to the late 1800s
- A 0.46-acre big-tooth aspen (Populus grandidentata)/sugar maple stand (Stand 23) along the northwest edge of the District, dating to 1930
- Three Eastern hemlock (*Tsuga canadensis*) stands: 2.6 acres near the District boundary with the King Farm, dating from 1900 to the 1930s (Stand 7); 8.8 acres along the northeast edge of the Forest, dating from before 1900 (Stands 38a-b)
- Two Eastern hemlock/mixed hardwood stands, both dating from the 1890s to the 1920s: 31.1
 acres near the northwest corner of the District (Stand 21) and 13.1 acres along the south edge of
 the Pogue (Stand 29)
- Five mixed hardwood stands from the late 1800s to the early 1900s: 4.2 acres just south of McKenzie Road (Stand 19); 15.7 acres (Stand 30) and 16.2 acres (Stand 31) on the steep ridge west of the Pogue; 83.4 acres along the south side of the Pogue Carriage Drive (Stand 39); and 28.9 acres surrounding the east end of the Pogue Carriage Drive (Stand 44)
- Three mixed hardwood (primarily red oak, or *Quercus rubra*)/hemlock stands from the late 1800s: 30.0 acres around the Summer Pasture (Stand 34) and 9.0 acres along the south edge of the District near the mid-slope of Mount Tom (Stands 37a-b)
- Two mixed pioneer stands: 7.4 acres adjacent to the King Farm, dating to the 1950s (Stand 5) and 3.4 acres from the 1920s near the Prosper Road entrance (Stand 14)
- Five red maple (*Acer rubrum*)/black ash (*Fraxinus nigra*) swamp stands covering 5.54 acres at vernal pools near the Pogue and the North Ridge (Stands 36a-e, no date information)
- Four sugar maple stands: 6.7 acres west of the Elm Lot, dating from the 1940s to 1960s (Stand 10); 3.9 acres adjacent to Stand 10, dating from the 1800s through the 1940s/1950s (Stand 11); 3.5 acres along the North Ridge, dating to before 1900 (Stand 32); and 1.8 acres from the 1890s paralleling the Summit Road between the Elm Lot and the Maple Lot (Stand 51)
- A 2.57-acre sugar maple/white ash (Fraxinus americana) stand from the 1940s near the West Ridge (Stand 9)
- Two sugar maple/mixed hardwood stands: 14.8 acres along the north side of McKenzie Road, dating to 1900 (Stand 20) and 24.4 acres on the north side of the North Ridge Loop, dating to 1920 (Stand 24)
- Two white pine stands: 5.2 acres from the 1940s at the southwest corner of the Elm Lot (Stand 6) and 9.7 acres from the 1930s to 1940s adjacent to Stand 6 (Stand 8)
- A 2.13-acre white pine/black cherry (*Prunus serotina*) stand from the 1930s near the Prosper Road entrance (Stand 15)

The northern hardwood and mixed forests typically have a more subtle, but still noticeable, impact on landscape distinguished by growth patterns that include greater spacing between trees, stumps in various stages of decay, skid trails with occasional "bumper" trees along the edge (trees sacrificed during logging in order to protect more valuable trees behind them), and trees with fewer defects, wounds, and signs of disease. In general, these stands retain their overall character related to forest management practices

Marsh-Billings-Rockefeller National Historical Park Name of Property

Windsor County, VT County and State

prominent from 1910 to 1997, primarily 1954–1997. Most are even-aged, which means they tend to have uniform canopy heights and trees of relatively the same age. As they mature and continue to be harvested, they develop uneven-aged stand characteristics and greater structural diversity (i.e., a distribution of size classes such as sapling, pole, or sawtimber).

Current forest management practices within the District recognize and work with ecological change to preserve the historic character of the Mount Tom Forest. Although some individual features may change in character, location, and extent over time through adaptation to changing ecological site conditions, the forest as a whole maintains a consistent overall mix of plantations, hardwood and mixed forest stands, and fields. To illustrate the character of reforestation techniques used on Mount Tom from 1887 to 1952, even-aged management practices are used for the existing plantations along the principal carriage drives or framing key views. 12 A representation of historic plantation types (such as red pine, European larch, Norway spruce, and mixed conifer) is maintained throughout the District. Harvesting has occurred in controlled cuts. Key plantations adjacent to the Mansion Grounds are renewed through single tree replacement using direct descendants or genetic legacies. Outside the main carriage drive corridors and grounds, conifer regeneration is encouraged where conditions are suitable through thinning of competing hardwoods, resulting in stands that resemble the character of some of the oldest plantations. Uneven-aged management practices are used for natural stands within the forest to promote a greater diversity of age classes and vertical structure. 13 Consequently, the number of legacy trees throughout the site is increasing. Mowing or forest thinning is used to maintain existing vistas, and some areas of dense understory regeneration along the carriage drives are thinned to create selective views into the forest. These practices also help to ensure the safety and accessibility of the forest.

The Mount Tom Forest includes a substantial man-made hydrological feature known as the Pogue (LCS No. none, contributing structure). This 14-acre pond created by the earthen Pogue Dam (LCS No. 040546, contributing structure) occupies a depression near the center of the Mount Tom Forest, at an elevation of 1140 ft between Mount Tom to the east and ridges to the north and west. An early nineteenthcentury description of the pond as a "miniature lake in the bosom of the hills, the central point in a region of rare beauty" continues to accurately capture the Pogue's charm (quoted in NPS 2002a:13). Surrounded by hardwood forests and an 1896 mixed conifer plantation, the Pogue is fed by rainfall, submerged springs, and two intermittent streams that flow off the ridge to the west. The pond serves a practical, as well as aesthetic, function as a water source for the entire estate. A pipeline system carries water from the Pogue to nearby watering troughs, to the gardens near the Mansion, to the Bungalow, and across Elm Street to Billings Farm & Museum. Frederick Billings had the dam constructed (the work was underway at his death in 1890) at the outlet of the original Pogue, an existing natural wetland and pond with a dense boggy bottom of peat-like muck that was dredged regularly to fertilize the farm fields. The dam under the southwest section of the Pogue Loop raised the water level of the pond several feet and enlarged the Pogue to its current size. Gurney Brothers Excavating rebuilt the dam in 1973 and again in 1991 to address annual flooding issues and excessive erosion. The Billings family had the pipeline system constructed c. 1900-02; the Rockefellers later deeded it to Billings Farm & Museum, which has since transferred ownership to the National Park Service but retains use rights.

¹² Even-aged management is a forest management approach designed to regenerate and maintain a stand with a single age class or two distinct age classes. Examples of even-aged management approaches include intermediate thinnings, shelterwood and seed tree harvests, and overstory removal (NPS 2006a:173).

¹³ Uneven-aged management is a forest management approach designed to regenerate and maintain a multi-aged forest stand structure by removing some trees in all age classes, either singly, in small groups, or in strips (NPS 2006a:177).

Marsh-Billings-Rockefeller National Historical Park Name of Property

Windsor County, VT County and State

Five agricultural fields are maintained within the Mount Tom Forest. These spaces typically cover gently rolling or sloping ground around the Pogue. They have clearly defined forest edges and are maintained with a generally uniform character. Interspersed between the dense forest plantations, these open spaces establish visual contrasts and view corridors that lend the site an unusual character of openness and enclosure. The Summer Pasture (LCS No. none, historic associated feature) is a hilltop pasture east of the Pogue. The <a href="Spring Lot (LCS No. none, historic associated feature) and the smaller field northeast of the Summer Pasture. The <a href="Elm Lot (LCS No. none, historic associated feature) are located south of the Pogue. The <a href="French Lot (LCS No. none, historic associated feature) on the west side of Mount Tom extends slightly beyond the District boundary into the property historically part of Hill Top Farm and later developed as a home by John French II. The Summer Pasture is still used for grazing, while the other four fields are still used for haying. To retain the general open character of the hayfields and pastures, perennial grasses are cultivated through annual mowing or grazing and nutrient management.

Four <u>Granite Property Markers (LCS No. none, historic associated features)</u>, each approximately 2 ft high and 4 inches square, engraved with the names of former property owners (for example, "NE Corner Rogers to Marsh 1800") identify original property lines within the Mount Tom Forest. Frederick Billings installed the markers c. 1885.

The System of Carriage Drives (LCS No. 040512, contributing structure) consists of approximately 10 miles of graded earth and gravel roadways that radiate west from the Mansion Grounds up and over Mount Tom to provide access to the Mount Tom Forest and lead to the summit of Mount Tom, which lies just beyond the District boundary. The broad, winding drives follow old farm roads and newer naturalistic alignments that conform to the property's rolling topography rather than a geometric pattern and, thus, seem to be an integral part of the landscape. They connect with the System of Estate Drives on the Mansion Grounds and traverse the mountain from east to west with an outlet at the western base along Prosper Road, winding in and out of the majestic stands of 100-yr-old trees and along the pastures and hayfields lined with ancient sugar maples. The roads intersect primarily at wide angles called Yintersections. The system also includes scenic byways to the south peak summit, the north ridge, and the Pogue and incorporates several loop overlooks at vista points and extensive drainage systems. Sections of three roads extend outside the District boundary onto adjoining properties. Frederick Billings had the system constructed beginning in 1880, intending the carriage drives for both utilitarian forestry and recreational purposes for his family and the community. The system nearly reached its current form by 1898, with only two major changes occurring in 1902 and 1978. In addition to the carriages that are still permitted and occasionally seen, horseback riders, pedestrians, hikers, snowshoers, cross-country skiers, park service and other authorized vehicles, and logging trucks all use the roads. The Woodstock Resort Corporation holds an easement over most of the carriage drives, as well as the trails within the District, that gives them the exclusive right to manage them for cross-country skiing, a recreational activity first introduced on the property by the Rockefellers in the 1970s. The main carriage drives are re-graded annually.

The carriage drives exemplify the marriage of form and function. The primary roads, generally the most heavily trafficked, are constructed of 6 inches of crushed stone over 6 inches of river gravel and rubble. Roads intended to handle heavy machinery associated with logging operations and forest management have a deeper sub-grade of 16 inches of river gravel. The road network includes a simple, but sophisticated, drainage system of ditches and outlet piping to manage runoff, developed to be both attractive and efficient. The design consists of a graveled surface with a center crown, or high point, that defines the cross-section, or profile, of the drive and deflects water and runoff to parallel ditches at the edges. The ditches have a typical depth of about 12 inches, and most have V-section profiles with a

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

tapered channel base. Narrow and visually inconsequential shoulders support the ditches and provide a stable edge to the road surface. The ditches discharge into natural drainages like ravines, wetlands, or water bodies or direct runoff toward a catch basin and/or culvert. Since its construction, the system has evolved from uniformly maintained drives with defined crowns and functioning ditches to drives with differing degrees of decline from the original cross-sections. Along some segments of the gravel roads, grading activities have substantially altered the relationship between a road surface and ditches, and some ditches are considerably deeper than their historic profile. The current carriage drive surfaces vary from vegetated clearings to full gravel cross-sections, but the subsurface structure of the entire system remains remarkably intact, likely due to the original high quality of construction (PDM et al. 2010:3).

The Pogue Carriage Drive (LCS No. none, historic associated feature), or Mountain Road, built c. 1872, is the primary carriage drive through the forest. The road begins at the Stable Drive off Elm Street and ascends the north slope of Mount Tom beyond the Mansion Grounds, passing by the Woodshed on its way toward the Pogue. The earthen roadbed is approximately 10 to 12 ft wide, crowned, graded, and mostly graveled. Mature trees form a thick canopy along it and create a lush, shady environment. The Pogue Carriage Drive heads north up the hillside along Elm Street before curving to the west, where a wooden double-swing gate restricts public vehicular access. Farther west, it converges with the Upper Meadow Road at a spot where the wooded median between the two parallel roads narrows to a V. The road ascends the mountain in a nearly straight westward line; enters a thick hemlock forest; crests and veers to the southwest around the Summer Pasture, hugging the curves of the Pogue stream; plateaus; then ascends through the woods to the southeast corner of the Pogue. The drive passes through Eastern hemlock forest and mixed hemlock-northern hardwood forest with a characteristic mix of Eastern hemlock and deciduous trees including American beech, sugar maple, and white ash. A vibrant understory of ferns and wood nettle creates a lush green effect in summer. As the drive enters the Pogue stream valley, moisture-loving Eastern hemlock dominates the surrounding forest. The thick forest canopy allows little light to reach the forest floor and limits the growth of ground cover, resulting in a more open understory.

The Lower Woodshed Road (LCS No. none, historic associated feature), built c. 1876 to serve the Billings forestry operations, branches off the Pogue Carriage Drive at a Y-intersection at the east end of the Woodshed yard. The road disappears in the yard but becomes distinct again in the woods west of the Woodshed, where it consists of two tracks that run in a westerly direction to edge of the property. A short, indistinct spur located 450 ft northwest of the Woodshed leads to a break in the stone wall at Route 12. The Sugar House Road Trace (LCS No. none, historic associated feature), farther west along the Pogue Carriage Drive, is a short length of road that led north to a sugarhouse (no longer extant) and was later incorporated into a cross-country ski trail. The short Spur to Upper Meadow Road (LCS No. none, historic associated feature) leads uphill from the Pogue Carriage Drive to the Upper Meadow Road at a point farther west. The spur forms a Y-intersection where a stream runs through a channel of laid fieldstone then passes under the Pogue Carriage Drive through a metal pipe covered with cut fieldstone.

The <u>Upper Meadow Road (LCS No. none, historic associated feature)</u> begins at the Belvedere Drive behind the Bowling Alley and leads west through a mature Norway spruce plantation to the Upper Meadow, where it makes a 90-degree turn to the north and follows the west side of the meadow along a 6-ft-high embankment. A gate built between 1954 and c. 1990 of unfinished dimensional lumber is located along this section of road. At the intersection with Wood Drive, the earthen graded roadbed turns west and continues along the wooded slope until it converges with the Pogue Carriage Drive. Built between 1872 and c. 1878 to provide access to the Billings kitchen garden, the road is approximately 10 ft wide and serves as the primary vehicular access between the Mansion and the Upper Meadow.

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

Several spurs branch off the south side of the Upper Meadow Road's initial section. Directly south of the Horse Shed, the Spur to Cemetery (LCS No. none, historic associated feature) leads southwest for approximately half a mile down a series of switchbacks to the north side of the River Street Cemetery (outside the district boundary) and ends at River Street. The fairly well-defined and crowned, not graveled, road exits the District about midway at a wood double-swing gate. No culverts channel the streams that flow across the roadbed. Billings had this spur, probably first constructed as a farm road during the early nineteenth century, rebuilt into a graded carriage drive in 1890. Beginning immediately east of the Spur to Cemetery, a second spur, the Spur to Garden Workshop (LCS No. none, historic associated feature), curves downhill (southeast) from the Upper Meadow Road to the circle at the west end of the Belvedere Drive. The 500-ft-long roadbed is cut into the hillside with evidence of a gravel surface and three earthen waterbars. It passes through mature deciduous woodlots and conifer plantations. Built c. 1878 possibly on the alignment of a Marsh-era mountain road, the spur is not actively used or maintained. Further down the hill to the east, two indistinct earth tracks form the 175-ft-long Shortcut to Garden Workshop (LCS No. none, historic associated feature) between the Upper Meadow Road and the Belvedere Drive. The tracks lead through grass and the fern-covered understory of a hillside Norway spruce plantation. Built between c. 1874 and 1887, they are not actively used or maintained.

The <u>Upper Meadow Through-Road (LCS No. none, historic associated feature)</u> cuts north to south across the meadow between the Upper Meadow Road (just east of the Horse Shed) and Wood Drive. Built between 1869 and 1874 and subsequently altered, the set of earthen tracks without a firm subgrade is susceptible to rutting. At the intersection with Wood Drive, a 250-ft-long, dead-end <u>Spur to Compost Area (LCS No. none, historic associated feature)</u> with no documented construction date leads northwest to a compost area. The spur was graded and surfaced with gravel at one point, possibly during the Rockefeller era when it was actively used, but has not been graded recently. The <u>Old Mountain Road (LCS No. none, historic associated feature)</u>, built by c. 1800, extends northwest and downhill for 450 ft from the north end of the Upper Meadow Through-Road to the Pogue Carriage Road. The 8-ft-wide track is partly graded into the hillside.

The <u>Summer Pasture Loop (LCS No. none, historic associated feature)</u> branches off the Pogue Carriage Drive to the northwest and follows the northern edge of the Summer Pasture. It connects back to the Pogue Carriage Drive farther west at an hourglass intersection. The distinctive landscape experience of the loop road around the open, light-filled pasture contrasts with the shaded canopy of the Pogue Carriage Drive. The <u>Spur to Spring Lot (LCS No. none, historic associated feature)</u> consists of a trail (probably a carriage road that has fallen into disuse) that branches off the loop road to the north and follows the east edge of the Spring Lot to the District boundary. The short <u>Spur to North Ridge Loop (LCS No. none, historic associated feature)</u> forms a Y-intersection at the north edge of the Summer Pasture.

The <u>Pogue Loop (LCS No. none, historic associated feature)</u>, constructed in 1890, begins at the west end of the Pogue Carriage Drive and loops around the Pogue, which is a major scenic focal point of the carriage drive system. The design of the road defines the 14-acre plot that the existing boggy pond was enlarged to fit and creates a sequence of views as one travels around the Pogue. Approaching the entrance to the loop, one sees first an opening in the forest canopy that anticipates the discovery of the water nestled between mountaintops. Travelling clockwise around the pond, the gravel road is elevated above the water as it crosses the earthen Pogue dam. The road then veers away from the water's edge, eventually masking the view to the right. It emerges out of the forest again as a two-wheeled track along the northern edge of the Elm Lot, a bright open space that presents a stark visual contrast with the dark cover of the forest. The road regains a gravel surface as it curves to the north, again following the shore line. More than 100 ft of sugar maple and yellow birch trees and brush between the road and the water's edge filter

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

the views of the Pogue as the road continues around the pond. After passing a small Y-intersection near the northeast corner of the Pogue with a short spur connecting it to the North Ridge Loop, the Pogue Loop comes to within 5 ft of the water along the east bank, offering expansive views of the entire pond.

The North Ridge Loop (LCS No. none, historic associated feature), constructed in the early 1890s, forms a large elliptical loop to the north of the Pogue. The loop features an overlook near the center of the north ridge with a framed vista of the opposite hills obscured in part by a tall understory. The Spur to East Ridge/Maple Grove (LCS No. none, historic associated feature) extends directly east from the eastern section of the loop and connects to the Portion of Maple Grove Loop (LCS No. none, historic associated feature) that lies within the District boundary. Two small loops that are no longer in use as roads, the East North Ridge Inner Loop Trace (LCS No. none, historic associated feature) and the West North Ridge Inner Loop Trace (LCS No. none, historic associated feature), extend inward from the larger loop road.

McKenzie Road (LCS No. none, historic associated feature) leads from the western edge of the North Ridge Loop in a westerly direction to the western boundary of the district at Prosper Road. The road, shown on a 1901 survey of the western portion of the Billings estate, descends along the northern slope of Mount Tom to the overgrown and abandoned site of the former McKenzie farm complex on Prosper Road, passing through red and white pine plantations and mixed northern hardwood stands. The clearly visible rows and uniform spacing of the plantations set the landscape of this road apart from the rest of the carriage drive system.

The Summit Road (LCS No. none, historic associated feature), completed in 1887, begins at the south corner of the hourglass intersection of the Pogue Carriage Drive and the Summer Pasture Loop and ascends to the south peak of Mount Tom. Only the westernmost portion of the road lies within the District boundary; the remainder is located within the Town of Woodstock's Billings Park. The crowned and graveled road quickly emerges from the dark cover of the woods to traverse the bright expanse of two meadows (the Elm Lot and the Maple Lot). A dense but narrow line of stately sugar maples parallels the road as it runs along the edges of the fields and becomes a simple double-wheel track in meadow grass. A large red pine plantation is visible on the southern edge of the Elm Lot. The thick growth of pine offers a stark contrast to the open hayfields; the dark greenery complements the fall foliage in autumn and stands out against the leafless hardwoods in winter. The road turns east briefly, passes under a tree canopy, then emerges from the woods to reveal a vista across the French Lot that offers a view of the open meadow in the foreground, the verdant hillsides of the Ottauquechee River Valley in the background, and Mount Ascutney on the horizon. Plantings of European larch bordering the hayfield on the east and Norway spruce on the west frame the vista. When the road leaves the District and enters Billings Park, it changes to a flat graveled surface with no drainage ditches and winds through the forest to hug the south face of North Peak before crossing a large stone causeway over a deep ravine to the back side of South Peak and ascending to an overlook at the summit with panoramic views of Woodstock Village. The Spur to Hill Top Farm (LCS No. none, historic associated feature) heads south from the Summit Road, just before it reaches the French Lot, to a Norway spruce allée planted in 1887 located above. The sunken and disused roadbed confined between rows of tall spruces is a short isolated remnant of a road that once descended to the yard of the former Hill Top Farm, outside the district boundary.

Stone Water Trough 1 (LCS No. 040545, contributing object) is located at the Y-intersection of the Pogue Carriage Drive and the Summer Pasture Loop. Stone Water Trough 2 (LCS No. 040545, contributing object) is located at the intersection of the Pogue Carriage Drive and the Summit Road. Both troughs, installed in 1899, consist of a single large fieldstone in the shape of an inverted triangle, with two bowls carved into the upper surface that are fed by a pipeline from the Pogue.

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

Stone-faced <u>Carriage Drive Culverts</u> (LCS No. 040544, contributing structure) are found in numerous locations along the carriage drives. The culverts vary in length from 17 ft to 40 ft and in diameter from 1 to 2 ft. The narrow culverts are generally lined with terra cotta pipes, while the wider ones have corrugated metal tubing; all have dry-laid fieldstone headwalls, intended to make them unobtrusive on the landscape. Three culverts are located at intermittent streams along the Pogue Carriage Drive within the Mansion Grounds, and the Summit Road crosses a small stone culvert over the Pogue stream. Built as part of Frederick Billings' carriage drive system, some of the culverts still provide a drainage function or carry water under the roadbeds, while others have become redundant.

In addition, numerous fieldstone Carriage Drive Retaining Walls (LCS No. 040547, contributing structure) support the road system and maintain the road profile in steep areas. The Old Mountain Road Retaining Wall (LCS No. none, historic associated feature), approximately 5 ft high and 60 ft long, carries the road across a wide swale and contains a culvert formed by a large stone slab. Likely built c. 1800 of dry-laid quarried stone, the wall is the only structure on the grounds that remains intact from the Marsh era and exhibits a rougher character than other retaining walls on the property. The Upper Meadow Road Retaining Wall (LCS No. none, historic associated feature), built c. 1872, is a 4-ft-high, dry-laid, random-coursed, cut-stone wall that extends for 120 ft along the east end of the Upper Meadow Road, west of the Bowling Alley. The Woodshed Yard Retaining Wall (LCS No. none, historic associated feature), built c. 1876, is a dry-laid, rubble-stone wall retaining the Pogue Carriage Drive for approximately 320 ft along the south side of the Woodshed yard. It reaches a maximum height of 8 ft beneath the Woodshed.

The Mount Tom Stone Walls (LCS No. 040548, contributing structure) consist of slope-hugging stone walls crossing the south and west shoulders of Mount Tom. Constructed between the 1790s and 1869, a period in which Mount Tom was cleared and used for grazing and agriculture, the dry-laid walls are generally two to three stones high and a single stone wide. They identify former field and pasture edges and convey the historic agricultural use of the forest.

The Mount Tom Footpaths and Trails (LCS No. 040511, contributing structure) include about 14 miles of skid trails, bridle paths, and hiking trails throughout the forest that probably date to the late nineteenth and early twentieth centuries, augmented by cross-country skiing trails since 1970. Forestry skid trails, built and/or maintained as secondary circulation features primarily for forestry and agricultural purposes during the Rockefeller era and perhaps before, generally consist of two earthen tracks through narrow corridors, without significant grading or major built features. As the layout of skid trails changed in response to the location and type of forestry work, many have undoubtedly disappeared. Frederick Billings developed the system of hiking trails between 1880 and 1888 for pedestrian and equestrian purposes. These trails, typically single earthen tracks through narrow clearings, parallel the carriage roads in part but also access difficult terrain and topographic high points. They include some minor grading and small built features, such as stone retaining walls, occasional log benches, and wood footbridges. George Aitken developed a bridle trail on Mt. Tom in 1896, possibly by simply reopening an overgrown road that had fallen out of use. The ski/hiking trails belong to a cross-country ski trail system established in 1977 by the Woodstock Ski Touring Center (Woodstock Resort Corporation) on new trails as well as extant carriage roads, trails, and former skid trails. Several of the ski trails are no longer actively used or managed. The Rockefellers granted an easement for recreational use of the carriage roads and ski trails to the Woodstock Resort Corporation prior to the donation of the property to the people of the United States. The Woodstock Resort Corporation uses the trails for orienteering and, until recently, groomed them in the winter for cross-country skiing.

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

Collections¹⁴

The museum collection consists primarily of history objects (approximately 20,000 objects) and archives. It also contains a number of natural history specimens collected by former property owners, including a herbarium of over 1,200 specimens, and a small number of archeological artifacts added since 1992.

The majority of the collection's history objects are domestic household furnishings acquired by Frederick and Julia Billings in the late nineteenth century for their country home. These furnishings are still on display in the Mansion. The collection also contains additional furnishings acquired by Mary French Rockefeller, granddaughter of Frederick Billings, and her husband, Laurance S. Rockefeller, for the Mansion, Belvedere, and Bungalow after they inherited the estate in 1951. The Bungalow furnishings came from Laurance's parents' vacation cottage in Seal Harbor, Maine (the Eyrie), after its 1962 demolition. The extensive furniture collection consists of high-quality items in the Renaissance Revival, Neo-Grec, and Eastlake styles as well as utilitarian items used in the service wing of the Mansion and in outbuildings. It also contains a large number of oriental carpets, textiles, high-quality silver, Chinese and Japanese ceramics, household appliances, and entertainment equipment. The Rockefeller items in the collection also include supplies and equipment for the fallout shelters in the Mansion and the Belvedere; sporting goods; music recordings; books; and ceramics inherited from Laurance's parents, John D. and Abby Rockefeller. A Historic Furnishings Report for all three buildings was completed in 2013.

The Billings also assembled a sizable art collection with works by several famous American artists associated with the Hudson River School, including Thomas Cole, John Frederick Kensett, and Asher B. Durand. The Rockefellers added to the art collection begun by the Billings. Additional artwork acquired by the Rockefellers includes the mountain landscapes *Scenery in the Grand Tetons* and *The Matterhorn* by Albert Bierstadt. The collection includes almost 600 works of art, including paintings, prints, drawings, sculpture, and photos. The Mansion library contains over 3,000 books and pamphlets collected by three generations of the Billings family over 150 years, reflecting the varied interests of the family. Personal effects in the museum collections include nineteenth and twentieth-century clothing, jewelry, shoes, hats, canes, gloves, collars, and parasols. Of particular importance is a collection of Asian costumes, including Japanese kimonos and kesas. An extensive collection of carriages stored in the Woodshed includes 18 horse-drawn pleasure vehicles and associated harness and tack used by the Billings family for transportation and recreational driving along the carriage roads.

The current National Park Service archives collection consists of the Rockefeller curator's pre-National Park Service files; the Billings-Kittredge Herbarium Files; the papers of Rockefeller designer and architect Theodor Muller; and park resource management files. Park staff has cataloged the Billings family pamphlet collection and has begun cataloging the Woodstock Resort Corporation's Estate Maintenance files from 1954 to 1998. The park's partner, The Woodstock Foundation, Inc., owns two important archival collections that document the Billings family and estate. The Billings Farm and Museum Archives is an estate-wide collection that includes bills and receipts documenting the construction and maintenance of the Mansion and Farm buildings. The Billings Family Archives documents the Billings-French family's occupancy from 1869 to 1951 and contains limited records from the Rockefeller period (1951–1997).

The natural history materials are primarily botanical specimens and several small specimens of minerals and shells. Materials collected during natural resource monitoring programs are maintained currently at Acadia National Park as part of the Northeast Temperate Network Inventorying and Monitoring Program.

¹⁴ The collections information is taken from the Scope of Collection Statement prepared in April 2013 by the park's Museum Curator, Laura Anderson.

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

The Billings-Kittredge Herbarium Collection, added in 2012, consists of 1200 unbound sheets of botanical specimens compiled in the early twentieth century by Elizabeth Billings and Elsie Kittredge on the Billings estate and in the Woodstock area. The archeological collections include approximately 35 artifacts recovered during an archeological survey undertaken as part of the 1997 rehabilitation of the Stable, along with several surface finds collected by park staff. All records associated with these collections are also retained.

Statement of Integrity

The contributing resources within the Marsh-Billings-Rockefeller NHP Historic District retain sufficient integrity to convey their significance associated with the history of American conservation, social history, architecture, engineering, and landscape architecture, as well as their associations with George Perkins Marsh, Frederick Billings, and Mary and Laurance S. Rockefeller. The District's location, setting, and associations remain intact with respect to the Marsh, Billings, and Rockefeller eras. In addition, the District retains integrity of design with respect to Billings and the Rockefellers and integrity of materials, workmanship, and feeling with respect to the Rockefellers. Very few changes have been made within the District since the initial 1954–1961 Rockefeller improvements. Minor changes implemented by the National Park Service since 1998 are all compatible with the overall historic character of the resources.

The Mansion, four of the estate outbuildings, the Upper and Lower Summer Houses, the Belvedere complex, the Bungalow, and the fallout shelter systems all retain integrity as distinctive or representative examples of various architectural types. The Systems of Estate and Carriage Drives retain integrity as rare surviving examples of pleasure drives constructed in the mid-nineteenth century. The roads have evolved through time, with materials being replaced as necessary to maintain them, but they retain their historic alignments and engineering characteristics.

The formal grounds around the Mansion retain much of the original character of the landscape developed by Frederick Billings with improvements from the 1890s through the 1960s. The existing spatial organization, lawns, circulation patterns, and views remain from the Billings era, while individual specimen trees, hedges, and beds illustrate later improvements. The Mansion Grounds are managed to convey a sense of the property's evolution through the occupancy of the Marsh, Billings, and Rockefeller families. At the same time, the grounds retain the distinctive characteristics of late nineteenth-century landscape design that define the property's significance in the area of landscape architecture. Much of the site's spatial organization, topography, circulation, large-scale vegetation, and buildings and structures from 1869 to 1917 survive. In addition, the Long Terrace and Flower Garden possess sufficient integrity as rare examples of Charles A. Platt's early work. The stepped topography, circulation, vistas, and spatial organization of the landscape remain intact, as do individual features including the Italian Fountain, Long Terrace Bench, stone benches, stone walls, bed edging, and steps.

The Forest is a working landscape that reflects three generations of continuous forest management and continues to evolve according to best current thinking and practices in forest management. Intact plantations set out by Billings and George Aitken between about 1874 and 1910, along with the infrastructure for forestry work that includes the carriage drive system and the Woodshed and its adjoining work yard, most clearly convey the early record of pioneering reforestation practices on the property. The forest plantations remaining from the first half of the twentieth century represent the fulfillment of Billings' pioneering practices as reforestation became institutionalized and widely practiced in the first decade of the twentieth century throughout the Northeastern states. The character of the plantations and hardwood and mixed conifer stands as they exist today conveys their association with the height of plantation forestry as a conservation practice during the first half of the twentieth century and

Marsh-Billings-Rockefeller National Historical Park Name of Property

Windsor County, VT County and State

with changes in forestry practices through the later half of the century. The overall character of the Forest most clearly demonstrates developments in American forestry practice from the early twentieth century to the end of the Rockefeller era in 1997 and strongly evokes Laurance Spelman Rockefeller's concept of "Conservation for People." Current forest management techniques maintain the diversity of forest stands and the general complex pattern of fields, plantations, hardwood and mixed forest stands, and legacy trees experienced from the main carriage drive corridors. As the forest evolves, existing individual features may be found in new locations, cover greater or lesser extents of the landscape, and exist in different stages of maturity. Outside the main corridors, a greater diversity of native species is being cultivated, resulting in hardwoods and mixed forest stands dominating most areas of the landscape. The network of carriage drives and trails; rustic bridges, culverts, and walls; views and vistas; placement of some of the plantations; and the Pogue are largely unchanged from their original design.

Marsh-Billings-Rockefeller National Historical Park Name of Property

Windsor County, VT County and State

HISTORIC DISTRICT DATA SHEET

CONTRIBUTING RESOURCES

NOTE: * This resource was previously listed in the National Register and documented as a contributing resource in a registration form accepted by the Keeper of the National Register.

RESOURCE NAME	ALTERNATE NAME (if applicable)	LCS ID/ ASMIS ID	DATE(S)	MAP#	РНОТО #
BUILDINGS = 11					
Mansion*	040538 1805–07; altered 1869–70, 1885–86, 1956–64		10	1–3	
Coachman's Cottage*	Double Cottage, Caretaker's Cottage	040522	c. 1870; altered 1945	10	4
Belvedere*		040519	1872–74; altered 1902–03, 1930–40, 1958–59, 1962–64	10	5, 6, 28
Bowling Alley*		040542	1872-74, altered 1902-03, 1930-40, 1958-59, 1962-64	10	8
Greenhouse*		040524	1872-74, altered 1902-03, 1930-40, 1958-59, 1962-64	10	6
Garden Workshop		040527	c. 1958; altered 1962-64	10	7
Stable*	Carriage Barn, Visitor Center	040521	1895; rehabilitated 1976–78, 1997–98	10	9
Garage	Generator Garage	040523	1908	10	10
Bungalow		040520	1917; altered 1959-61	10	11
Horse Shed	Pony Shed	040525	c. 1961	9	12
Mansion Garage		040541	c. 1977	10	13
STRUCTURES = 19					
Perimeter Stone Wall		040517	1869-c.1878; altered 1912	8-10	14

RESOURCE NAME	ALTERNATE NAME (if applicable)	LCS ID/ ASMIS ID	DATE(S)	MAP#	РНОТО #
Main Entrance Gateway		040515	c. 1870; altered 1903, 1912	10	15
Lower Summer House		040526	c. 1875	10	16
Jpper Summer House		040528	c. 1874; c. 1877	10	17
Historic Associated Features	-				
Upper Summer House Stone Wall		none	c. 1877	10	17
Reservoir		040529	1907	10	18
Voodshed	Woodbarn	040530	1875–76; altered 1895–1900; rehabilitated 2007	8	19
Tennis Court		040539	c. 1930	10	20
Swimming Pool		040540	1930-31; altered 1957	10	6
System of Estate Drives*		040510	c. 1870–72; altered 1903–04, 1908, 1912, 1978, 1998–99	9–10	
Historic Associated Features					
Main Entrance Drive		none	c. 1870; altered 1903-04, 1912	10	15
Secondary Entrance Drive		none	1978	10	None
Mansion Parking Area		none	c. 1956	10	None
Mansion Parking Area Stone Wall		none	c. 1870; altered c. 1956	10	None
Stable Drive		none	c. 1870; altered 1903-04, 1998-99		None
Coachman's Cottage Drive		none	c. 1870; altered 1908 10		None
North Street Road		none	c. 1872 9, 10		None
Belvedere Drive		none	c. 1872; altered 1903–04 9, 1		22
Belvedere Drive Retaining Wall		none	c. 1872	9, 10	22

RESOURCE NAME	ALTERNATE NAME (if applicable)	LCS ID/ ASMIS ID	DATE(S)	MAP#	РНОТО #
Wood Drive		none	c. 1904	10	None
Wood Drive Retaining Wall		none	c. 1904	10	None
Wood Drive Stone Stairway		none	c. 1904	10	None
Path to Thompson Place		none	c. 1870	8, 9	None
Upper Hillside Path		none	1897-1899	10	None
arboretum Path		none	1899	9, 10	None
System of Carriage Drives		040512	1869–98; altered 1902, c. 1903–04, 1908, c. 1956, 1978, 1998–99	2–10	
Historic Associated Features					
Upper Meadow Road	· ·	none	1872-c. 1878	8, 9, 10	None
Spur to Garden Workshop		none	c. 1878	9, 10	None
Shortcut to Garden Workshop		none	c. 1874–1887	10	None
Spur to Cemetery		none	1890	9	None
Upper Meadow Through-Road		none	1869–1874	9	None
Spur to Compost Area		none	n.d.	9	None
Pogue Carriage Drive	Mountain Road	none	c. 1872	6	21
Lower Woodshed Road		none	c. 1876	8	None
Old Mountain Road		none	c. 1800	8, 9, 10	None
Sugar House Road Trace		none	Prior to 1869		None
Spur to Upper Meadow Road		none	By 1895	8, 9	None
Summer Pasture Loop		none	By 1895	4	21

RESOURCE NAME	ALTERNATE NAME (if applicable)	LCS ID/ ASMIS ID	DATE(S)	MAP#	РНОТО #	
Spur to Spring Lot		none	By 1895	6	None	
Spur to North Ridge Loop		none	By 1895	4	None	
North Ridge Loop		none	c. 1890	3, 4, 6	None	
Spur to East Ridge/Maple Grove		none	By 1895	6	None	
Portion of Maple Grove Loop		none	By 1895	6	None	
East North Ridge Inner Loop Trace		none	c. 1890	4	None	
West North Ridge Inner Loop Trace		none	c. 1890	3, 4	None	
McKenzie Road		none	1895	2, 4	None	
Pogue Loop		none	1890–1891	4	None	
Summit Road		none	1887	5, 7	None	
Spur to Hill Top Farm		none	c. 1887	5	None	
arriage Drive Retaining Walls		040547		8, 9, 10		
Historic Associated Features						
Woodshed Yard Retaining Wall		none	c. 1876	8	None	
Upper Meadow Road Retaining Wall		none	c. 1872	10	None	
Old Mountain Road Retaining Wall		none	c. 1800	9, 10	None	
Carriage Drive Culverts		040544	1869-88	4, 5	23	
Pogue		none	before 1900	4	31	
Pogue Dam		040546	1890	4	None	
Mount Tom Stone Walls		040548	1790–1869	none	24	
Mount Tom Footpaths and Trails		040511	1880–88; 1977	1–9	None	

RESOURCE NAME	ALTERNATE NAME (if applicable)	LCS ID/ ASMIS ID	DATE(S)	MAP#	РНОТО #
OBJECTS = 7					
Italian Fountain			1899	10	26
Long Terrace Bench			1897-1898	10	27
Baigneuse Drapée (The Seine) Sculpture			c. 1921	10	None
Brownstone Bench		040518	c. 1899	10	None
Stone Ledge Bench		040518	c. 1904	10	None
Stone Water Trough 1 (Pogue Carriage Drive/Summer Pasture Loop Intersection)		040545	1899	6	21
Stone Water Trough 2 (Pogue Carriage Drive/Summit Road Intersection)		040545	1899	4	None
SITES = 12					
Mansion Terrace Designed Landscape*	Mansion Grounds	none	c. 1870–1917; altered c.1956, c. 1968–76	9–10	25
Historic Associated Features					
Hitching Post		040543	c. 1895	10	None
Roadside Lampposts (3)		040516	Late 1950s	10	None
Lawn		none	c. 1870	10	25
Swale		none	c. 1870; altered c. 1968-c. 1976	10	None
Summer Houses Path		none	c. 1874; altered c. 1901, c. 1956	10	None
Mansion-Flower Garden Walk		none	c. 1873	10	None
Flower Garden*	Foursquare Garden	040514	1894-99; altered c. 1956, c. 1998	10	26

RESOURCE NAME	ALTERNATE NAME (if applicable)	LCS ID/ ASMIS ID	DATE(S)	MAP#	РНОТО #
Flower Garden Retaining Wall		none	1895-1896	10	26
Flower Garden Walks and Steps		none	1895		26
Flower Garden Benches		none	1896	10	26
Flower Garden Rock Gardens		none	c. 1962	10	None
Long Terrace		none	1897-98; altered c. 1955	10	27
Historic Associated Features					
Long Terrace Walks and Steps		none	c. 1955	10	None
Putting Green		none	c. 1968	10	None
Historic Associated Features			,		
Putting Green Wall		none	c. 1968	10	None
Putting Green Rock Gardens		none	c. 1962–c. 1987	10	None
Cutting Garden		none	1930; altered c. 1967-68	10	6
Historic Associated Features		•			
Cutting Garden Walks			1930; altered c.1967-1986	10	None
Pool Terrace		none	1959–c. 1962	10	6, 28
Historic Associated Features	<u>'</u>			-	
Pool Patio		none	1957-с. 1962		6
Pool Terrace Steps		none	1957-с. 1962		6, 28
Pool Terrace Rock Gardens		none	c. 1962–c. 1987	10	28
Pool Terrace Wall		none	1957–c. 1962	10	28
Pool Terrace Railing		none	1957–с. 1962	10	None

RESOURCE NAME	ALTERNATE NAME (if applicable)	LCS ID/ ASMIS ID	DATE(S)	MAP#	РНОТО #
Pool Patio Brick Walls and Barbeque		none	c. 1959	10	None
Sundial Base		none	1896; moved c. 1899 and c. 1962		28
Fernery	Waterfall Garden	040513	c. 1893–97, 1966–69	10	29
Historic Associated Features					
Fernery Path		none	c. 1893; altered c. 1897	10	None
Fernery Watercourse		none	c. 1897; rebuilt 1966–1969	10	29
Lily Pond Garden		none	c. 1885, c. 1901, 1913	10	30
Historic Associated Features					
Lily Pond Path		none	c. 1885; altered 1913	10	None
Lily Pond Waterfall Path		none	c. 1901	10	30
Lily Pond		none	c. 1885	10	30
Lily Pond Dam		none	c. 1885	10	None
Lily Pond Waterfall		none	c. 1901	10	None
Lily Pond Lower Waterfall Bridge		none	c. 1885	10	30
Lily Pond Upper Waterfall Bridge		none	c. 1901	10	None
Jpper Meadow		none	c. 1961	9	None
Historic Associated Features					1.
Upper Meadow Corral Fence		none	c. 1961	9	None
Woodshed Yard		none	c. 1876	8	19
Bungalow Clearing		none	c. 1917	10	None
Mount Tom Forest		none	1870s-1950s	1–9	31, 32

RESOURCE NAME	ALTERNATE NAME (if applicable)	LCS ID/ ASMIS ID	DATE(S)	MAP#	РНОТО #
Historic Associated Features					
Summer Pasture		none	before 1900	4, 6	None
Spring Lot		none	before 1900	6	None
Elm Lot		none	before 1900	5	32
Maple Lot		none	before 1900	5	None
French Lot		none	before 1900	5	None
Granite Property Markers (4)		none	c. 1885	3,4,6	None

Marsh-Billings-Rockefeller National Historical Park Name of Property

Windsor County, VT County and State

NON-CONTRIBUTING RESOURCES

RESOURCE NAME	ALTERNATE NAME (if applicable)	LCS ID/ ASMIS ID	DATE(S)	MAP#	РНОТО #
BUILDINGS = 5					
Forest Center		none	2007	8	33
Maintenance Sheds (4)		none	2013	9	None

Windsor County, VT County and State

Areas of Significance

(Enter categories from instructions.)

CONSERVATION

ARCHITECTURE

ENGINEERING

LANDSCAPE ARCHITECTURE

SOCIAL HISTORY

AGRICULTURE

Period of Significance

1801-1997

Significant Dates

1801: Birth of George Perkins Marsh

1869: Purchase of property by Frederick Billings

1954: Acquisition of property by Mary French and Laurance Spelman Rockefeller

1992: Establishment of Marsh-Billings-Rockefeller National Historical Park

1997: End of Laurance Rockefeller's life estate

Significant Person

(Complete only if Criterion B is marked above.)

Marsh, George Perkins

Billings, Frederick

Rockefeller, Laurance Spelman

Cultural Affiliation

N/A

Architect/Builder

Emerson, William Ralph (architect, 1869–1870 Mansion remodel)

Holly, Henry Hudson (architect, 1885–1886 Mansion remodel)

Muller, Theodor (architect, 1955–1965 Mansion alterations, Garden Workshop, Horse Shed)

Magonigle, Harold Van Buren (architect, Bungalow)

Lienau, Detlef (architect, Belvedere, Bowling Alley)

Rossiter, Ehrick Kensett (architect, Carriage Barn)

Lord, Frederick/Lord & Burnham (builder, Greenhouse)

Platt, Charles A. (landscape architect, Mansion grounds)

Shipman, Ellen Biddle (landscape architect, Mansion grounds)

Copeland, Robert Morris (landscape architect, Mansion grounds, Carriage Roads)

Hutcheson, Martha Brookes Brown (landscape architect, Mansion grounds)

Schreiber, Zenon (landscape architect, Mansion grounds)

Lynch, Bryan J. (landscape architect, Mansion grounds, Carriage Roads)

Jones, Robert Trent (landscape architect, Putting Green)

Marsh-Billings-Rockefeller	National	Historical	Park
Name of Property			

8.	Sta	aten	nent of Significance
	rk '	"x" i	e National Register Criteria in one or more boxes for the criteria qualifying the property for National Register
X		A.	Property is associated with events that have made a significant contribution to the broad patterns of our history.
X		B.	Property is associated with the lives of persons significant in our past.
X		C.	Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
		D.	Property has yielded, or is likely to yield, information important in prehistory or history.
			onsiderations in all the boxes that apply.)
		A.	Owned by a religious institution or used for religious purposes
		B.	Removed from its original location
		C.	A birthplace or grave
		D.	A cemetery
		E.	A reconstructed building, object, or structure
		F.	A commemorative property
X		G.	Less than 50 years old or achieving significance within the past 50 years

Windsor County, VT County and State

Statement of Significance Summary Paragraph (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations.)

The Marsh-Billings-Rockefeller National Historical Park (NHP) Historic District possesses national significance under National Register Criteria A, B, and C. It derives significance in the area of Conservation under Criterion A as a model example of progressive private conservation practices during the late nineteenth and twentieth centuries and under Criterion B for its associations with the contributions of George Perkins Marsh (1801-1882), Frederick Billings (1823-1890), and Laurance Spelman Rockefeller (1910-2004) to the history of conservation. Marsh was born on the property and lived there through circa (c.) 1824; it remained his family home through 1869. His ground-breaking 1864 book, Man and Nature, laid the foundations for the conservation movement in America by elucidating a pragmatic approach to the stewardship of natural resources that suited the Industrial Age. It inspired Billings, who was born in nearby Royalton, Vermont, made his fortune as a real estate lawyer during the California Gold Rush, and later led the Northern-Pacific Railroad, to create a model country estate on the Marsh family property. Billings' integration of forestry and landscape gardening there from 1869 through his death in 1890 was one of the earliest known conservation efforts to follow the concepts articulated by Marsh and illustrated the close relationship between aesthetics and environmental sustainability that became a defining characteristic of American conservation. His application of progressive scientific agriculture practices, in particular woodlot management and reforestation, define the property's significance under Criterion A in the area of Agriculture. Billings' heirs continued to apply his conservation philosophy in their improvements to and maintenance of the estate through the early twentieth century. His granddaughter Mary French Rockefeller, who inherited the property in 1954, and her husband Laurance, an active conservationist who advocated the use of public-private partnerships as preservation tools, extended the concept of responsible stewardship to the natural and historic resources of the surrounding village of Woodstock. The couple used the estate as a summer home from 1961 to 1997 and carefully preserved the Mansion, Forest, and adjacent farm as a model of sustainable development. The creation of a National Historical Park on the property in 1992 exemplified Laurance and Mary Rockefeller's broad vision of conservation as a public responsibility. The fallout shelters under the Mansion and Bowling Alley contribute to the site's significance in the area of Social History for its associations with the civil defense movement of the Cold War era and the construction of private fallout shelters.

The District is significant under Criterion C in the areas of Landscape Architecture and Architecture as an intact, representative example of a late nineteenth-century gentleman's farm. It contains examples of the work of several prominent architects and landscape architects, including the Long Terrace and Flower Garden, a rare surviving example of the early work of master landscape architect, architect, and artist Charles A. Platt. The Mansion's Queen Anne-style exterior completed in 1886 is a distinctive example of architect Henry Hudson Holly's estate designs. The Belvedere/Bowling Alley/Greenhouse/Garden Workshop complex represents the work of the master architect Detlef Lienau and the noted greenhouse manufacturer Lord & Burnham. Additional architectural resources within the District consist of the Upper and Lower Summer Houses—rare surviving examples of nineteenth-century rustic design possibly designed by Lienau; the Coachman's Cottage, Woodshed, Garage, and Stable—representative late nineteenth- to early twentieth-century country estate outbuildings; and the Bungalow, a representative example of the Craftsman style designed by H. Van Buren Magonigle. The property also derives significance in the area of Architecture for its five Cold War-era fallout shelters, which are rare surviving examples of architect-designed or pre-fabricated shelters from the early 1960s. The System of Estate

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

Drives and System of Carriage Drives are significant in the area of Engineering as rare intact examples of nineteenth-century carriage road systems designed and constructed in the United States that illustrate contemporary recommended practices for roadway construction.

The period of significance for the Marsh-Billings-Rockefeller NHP Historic District begins with the birth of George Perkins Marsh in 1801 and extends through the end of Laurance S. Rockefeller's life estate in 1997. Criteria Consideration G for the extension of the period of significance to a point less than 50 years ago applies to the district because of Rockefeller's nationally significant contributions in the area of conservation throughout his entire life and his continued progressive stewardship of the Marsh-Billings-Rockefeller property through its transfer to the National Park Service in 1997.

Narrative Statement of Significance (Provide at least one paragraph for each area of significance.)

CRITERION A – CONSERVATION

The Marsh-Billings-Rockefeller NHP Historic District (the District) is nationally significant under Criterion A in the area of Conservation as a cultural landscape that illustrates the evolution of the American conservation movement from its mid-nineteenth-century beginnings through the late twentieth century. The District as a whole represents the form of sustainable and profitable conservation implemented by Frederick Billings from 1869 to 1890 according to the ideas set forth by George Perkins Marsh in his influential 1864 book, *Man and Nature*, and maintained by Billings' heirs over the course of the century after his death in 1890 through 1997. The Mount Tom Forest appears to be the oldest extant continuously managed scientific forest associated with a private estate in the United States.

The Billings Estate as a Model Conservation Site, 1869–1890¹⁵

In the autumn of 1864, the year Marsh's treatise on *Man and Nature* was first published, native Vermonter and prominent real estate lawyer Frederick Billings gave a speech at the Windsor County Fair in Woodstock, Vermont, in which he argued that conservation practices based on scientific principles, like those presented in *Man and Nature*, could return the state's agricultural economy to the prominence and productivity it enjoyed in the early part of the century. Five years later, Billings chose to embark on an ambitious land stewardship project at the place where Marsh first experienced nature. His purchase of the Marsh family farm in Woodstock in February 1869 marked Billings' permanent return from the West to his childhood home and the beginning of his pioneering conservation program. Familiar with the decline of the rural landscape in his native state of Vermont and across the country, Billings based his work in large part on Marsh's conservation philosophy, together with his own interests in rural

¹⁵ Except where noted, information used to develop the historical contexts, background, and historical development of individual resources contained in this document was compiled from existing cultural resource management reports prepared for Marsh-Billings-Rockefeller NHP. The main sources include the Cultural Landscape Report for the Mansion Grounds, Volume I: Site History, John E. Auwaerter and George W. Curry (2005); Cultural Landscapes Inventory: Mansion Grounds and Forest, National Park Service (2008); Land Use History for Marsh-Billings Rockefeller National Historical Park, H. Eliot Foulds, Katharine Lacy, and Lauren G. Meier (1994); Cultural Landscape Report for the Forest at Marsh-Billings-Rockefeller National Historical Park: Site History and Existing Conditions, Sarah Wilcke, Leslie Morrisey, Jennifer Treadwell Morrissey, and James Morrissey (2000); and Forest Management Plan and Environmental Assessment for Marsh-Billings-Rockefeller National Historical Park, National Park Service (2006).

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

improvement and landscape beauty. His application of Marsh's principles over the course of the next two decades, as the conservation movement began to take hold in America, resulted in a model farm and country estate that reflected Marsh's ideal of a productive and sustainable relationship between people and the land.

The Origins of American Conservation

Marsh's fundamental thesis about the limits of the natural world and the human capacity to destroy the landscape appeared at a critical juncture in American social history. As the nation readjusted politically to the aftermath of the Civil War, it also began to address the physical consequences of the nineteenth century's unprecedented demographic, geographical, and economic expansion. The preceding decades had witnessed the development of a massive industrialized economy accompanied by rapid population growth and urbanization and facilitated by a vast transportation network of canals, roads, and rail lines. Changes of such magnitude inevitably altered the country's physical landscape along with human relationships to it. To a large majority of Americans, the changes represented unqualified progress and the rational and inevitable use of an overabundance of resources. Growth and development continued throughout the nineteenth century on a scale far beyond anything undertaken in the antebellum years (Albers 2000:196–197; Dorman 1997:3).

By the 1860s, the environmental impacts of the Industrial Revolution were evident across the country, but especially in the Northeast where it originated. Damming of the region's waterways blocked stream flows and disrupted inland fisheries; and waste dyes, pulp, and human sewage polluted the water. Perhaps the most visible effect on the landscape, however, was the rapid depletion of the dense old-growth forests that had covered large parts of the region when the first colonists arrived. The forest cover in most New England states reached historic lows during the 1850s and 1860s. In 1620, the region was 95% forested; by 1850, Vermont had 45% forest cover, Massachusetts, 40%, and Connecticut, only 30%. New farm machinery and larger, more specialized, commercial farms increased the need for cleared pastureland. In addition to acreage, clearing provided landowners with felled timber, an increasingly valuable commodity. Between 1800 and 1850, the total volume of wood used by Americans increased by a factor of six, making the lumber industry first in the United States among all types of manufacturing in 1840. Trees served as fuel for homes, businesses, and steamboats; as construction material for buildings and railroad ties; and as raw material for charcoal in iron manufacturing and potash for fertilizers. Boston alone, according to one estimate, needed 600,000 cords per year for burning and building. The rail-style fencing used by most American farmers, covering an estimated 3.2 million miles by 1850, also consumed a large amount of timber (Albers 2000:206; Dorman 1997:4-7; Foster 2009:128-129; Irland 2011:57-59).

The rising demands for lumber by railroads and paper companies provided Vermont—the birthplace of both Marsh and Billings—with much-needed economic opportunities to replace the state's declining sheep, wheat, and small grain industries. The effects on the landscape were devastating, though. By the mid-nineteenth century, Mount Peg, rising to the east of the Marsh place, was completely cleared and displayed signs of serious erosion. After the Civil War, when logging was Vermont's largest and most lucrative industry, forest depletion peaked in the state with approximately 80% of the land cleared. By the late 1860s, Burlington was the fourth largest lumber port in the country. However, within several years the state's forests were so depleted that most of Burlington's stock came from Canada (Albers 2000:224; Foster 2009:135; Gregg 2011:112).

Marsh-Billings-Rockefeller National Historical Park Name of Property

Windsor County, VT County and State

In 1831, Alexis de Tocqueville noted the tendency in the United States to view the country's natural resources purely as commodities: "In Europe, people talk about the wilds of America, but the Americans never think about them, they are insensitive to the wonders of inanimate nature, and they may be said not to perceive the mighty forests that surround them 'till they fall beneath the hatchet'" (quoted in Foulds, Lacy, and Meier 1994:5). Many European countries, in particular Germany and France, had well-established forest regulation and administration procedures by the early nineteenth century that included both government-sponsored and private reforestation efforts; Germany also had state forest reserves. In contrast, America's small and limited government lacked any form of conservation policy or regulation. Most of the approximately 1,000 land laws passed by Congress since the beginning of the republic involved the regulation of land distribution and sale rather than its use and, thus, had little impact on protecting the landscape. The establishment of the Department of Interior in 1849 and the Department of Agriculture in 1862 represented efforts to provide some oversight of the country's rapid expansion, but both agencies concerned themselves more with increasing national productivity than protecting natural resources (Dorman 1997; Foulds, Lacy, and Meier 1994:5).

Some far-sighted individuals, however, did express concern for the consequences of human development on the American landscape; namely, the depletion of forests and soils as a result of excessive land-clearing. As early as 1784, statesman Benjamin Rush warned of the potential effects of deforestation. President Madison echoed such concerns in an 1818 speech noting the "injurious and excessive destruction of timber and firewood" (quoted in Dorman 1997:20). Agriculturalist John Lorain's 1825 Nature and Reason Harmonized in the Practice of Husbandry described the damaging effects of typical American farming methods. The prominent naturalist John James Audubon described the forest habitats where he had studied the specimens for his Birds of America (1827–1838) as "fast disappearing under the axe" and predicted "in a century the noble forests . . . should exist no more" (quoted in Dorman 1997:21). In the early 1850s, nature writer Susan Fenimore Cooper (daughter of James Fenimore Cooper) denounced the practice of deforestation in Rural Hours, noting how "the hills are becoming more bare every day" (quoted in Dorman 1997:21).

Following the Civil War and the publication of Marsh's timely and influential book, greater environmental consciousness and awareness of the need for public regulation and planning emerged. The Reverend Frederick Starr is often credited with first raising the alarm over a "national famine of wood." Writing in The Report of the Commissioner of Agriculture for the Year 1865 on "American Forests: Their Destruction and Preservation," Starr pointed to the ill effects of deforestation not only on the "health of the people" and the "salubrity of the climate" but also on "the production of our soils" and the "increase of our national wealth" (quoted in Dorman 1997:45). Directly inspired by Marsh's Man and Nature, physician Franklin B. Hough lectured in Portland, Maine, in 1873 "On the Duty of Governments in the Preservation of Forests" to the American Association for the Advancement of Science (AAAS). The association's subsequent report to Congress that included Hough's paper helped to secure passage of the Timber Culture Act of 1873, the first federal attempt at reforestation policy. Like much federal resource law in the nineteenth century, however, the act was directed more at land distribution than conservation and had little overall impact on the landscape. Similarly, the timber culture laws passed by numerous states in the late 1860s and early 1870s had meager results because they were accompanied by very minor incentives (small bounties or tax breaks) for individual landowners and no real means for inspection or enforcement. The environmental implications of unchecked exploitation of the country's natural resources did not lead to more critical inquiry and federal government organization until the late 1870s and 1880s (Dorman 1997:45; Foster 2009:129; Nadenicek 2004:24).

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

The U.S. Commissioner of Agriculture appointed Hough in August 1876 to study European and American forestry practice. Hough's 1877 *Report on Forestry* reiterated much of what the former physician John A. Warder, considered to be the founder of professional forestry in the United States, had described in his 1876 "Report on Forests and Forestry" based on his exposure to European foresters at the Vienna World's Exposition in 1873. Also in 1877, Carl Schurz, Secretary of the Interior under President Rutherford B. Hayes and one of the first high-ranking federal officials to articulate the issue of a timber shortage, wrote that the "destruction of the forests . . . seriously concerns our national prosperity" and predicted that the decreasing timber supply would turn "fertile agricultural districts into barren wastes" by undermining the "regularity of the water supply." Schurz recommended the withdrawal of timberlands from private development and suggested that a presidential commission be appointed to "study the laws and practices adopted in other countries for the preservation and cultivation of the forests...." (quoted in Dorman 1997:45). In 1881, Congress created the Division of Forestry within the Department of Agriculture and appointed Hough as its first chief (Bergoffen 1976; Clepper 1971; Dorman 1997:41–45; McCullough 1995:98–99; Nadenicek 2004:24).

Although professional forestry programs were not offered anywhere in the United States until the late 1890s, scientific knowledge of forest growth, cover, and distribution advanced considerably during the 1870s and 1880s. Literature on scientific agriculture included discussions on the sustainable management of trees as necessary farm components, valuable for replenishing the soil. In 1873, William H. Brewer, a botanist at Yale, produced the first comprehensive map of the Woodland and Forest Systems of the United States, which revealed no extensive unbroken areas of forestation. In 1883, Charles Sprague Sargent, who is known to have corresponded often with Marsh, published his Report on the Forests of North America and, in 1888, the first of his massive 15-volume Silva of North America. Sargent's and Brewer's works provided the most detailed survey of forest density, distribution, and composition ever undertaken up to that date. The American Forestry Association (AFA), organized by Warder in 1875, and the American Forestry Congress, also organized by Warder and merged with the AFA in 1882, provided valuable opportunities for research and debate on forestry practice and policy. In the early 1880s, the landscape architect Horace Cleveland, author of the 1873 publication Landscape Architecture as Applied to the Wants of the West with an Essay on Forest Planting on the Great Plains, recommended the establishment of a private forest reserve and related school of forestry near Natural Bridge, Virginia. Billings followed forestry discussions in newspapers and periodicals and clipped articles of interest. He developed correspondence with forestry experts (including Sargent) and added works by Warder, Hough, and Cleveland to his library (Dorman 1997:42; Nadenicek 2004:55).

National policies influenced New England conservationists, but state and local efforts made more progress in the short term. Historian Richard Judd has proposed that New England's long tradition of a close engagement with the land and the commons principle nurtured a spirit of conservation among the region's farmers, fishermen, and hunters. Early state conservation policies in New England consisted primarily of laws mandating hunting seasons and advisory boards or commissions created to address the issue of depleted fish populations, but local agricultural improvement societies advocated reforestation methods among their members since at least the 1790s. As local economies became increasingly dependent on wood-products industries throughout the nineteenth century, and as recognition of the recreational value of forests spread, a growing regional advocacy for timber conservation appeared. In 1869, Maine appointed a commission to study state forestry practice; other New England states followed suit in the subsequent decades (Connecticut in 1877, New Hampshire in 1881, Vermont in 1882, and Massachusetts by 1890). The commissions initially functioned as temporary advisory organizations for gathering information and considering legislation, but many produced reports that resulted in laws and

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

became a permanent part of state government in subsequent decades (Dorman 1997:42–43; McCullough 1995:115–131; Nadenicek 2004:32, 37–38).

Notwithstanding the progress in introducing conservation into the larger public dialogue and some federal and state policies, a large percentage of the conservation work during the late nineteenth century was the result of purely voluntary, progressive private stewardship. Wealthy gentlemen such as Frederick Billings possessed the substantial resources necessary to undertake systematic landscape planning and implement scientific forestry and other conservation management measures on their large private estates. Without political or legal obstacles to overcome, they were able to offer foresters and farm managers opportunities to experiment with new techniques. The Billings estate in Woodstock epitomizes late nineteenth-century conservation efforts. Private forests and forest experiments that preceded Billings included John Warder's Aston (NRIS# 78002084) near Cincinnati, Ohio, begun in 1855 and essentially the first agricultural experimental station in the country, and George Barrell Emerson's 1847 experimental plot near Boston Harbor (Vermont Division for Historic Preservation 1991).

During the post-Civil War period, many wealthy American industrialists like Billings established large country estates. Even at the height of the so-called Country Place Era in the United States, however, Vermont witnessed the development of only a very few grand country places. Woodstock, in particular, remained outside the sphere of country place society a bit longer as a result of its relatively isolated physical location. The village was not connected to the railroad until 1875, after Billings purchased his estate. The majority of Vermont country places resembled the modest farm- and village-scale residences built in the late 1880s in Woodstock's rural Sunny Side district, a stretch of farmland east of the Billings estate along River Road. The larger estates appear to have been largely concentrated in the Champlain Valley region, particularly Addison and Rutland counties. In addition to Billings', four other large estates that served as model gentleman's farms are known to have survived in Vermont: William Seward Webb's Shelburne Farms in Shelburne (NHL 2001), Willard S. Martin's Greatwood Farm in Plainfield (now Goddard College Campus, NRIS# 96000253), Joseph Battell's Morgan Horse Farm in Weybridge (now part of the University of Vermont College of Agriculture, NRIS# 73000183), and Elmer Darling's Mountain View Farm in Burke (now a privately owned inn and animal sanctuary, NRIS# 10000911) (Madison 1999:32; Vermont Division for Historic Preservation 1991).

Battell, a state representative from Middlebury who opposed the clear-cutting practices of paper companies, began his conservation work around the same time as Billings. He started buying up forested land in Ripton, Vermont, in 1865 and eventually acquired over 30,000 acres in the state, including Camel's Hump and Mount Ellen (at the northern end of the Green Mountain National Forest established in the 1930s). Battell introduced the bill that established the Vermont state forestry commission in 1882 with Billings as a member. In addition to his interest in forestry, Battell's work breeding Morgan horses on a farm in Weybridge, begun in the late 1870s, saved the breed from extinction. Webb, a New York financier, developed Shelburne Farms near Burlington between 1886 and 1901, financed by his wife's Vanderbilt family fortune and with help from landscape architect Frederick Law Olmsted, Sr. and professional forester Gifford Pinchot. The estate eventually spread over 4,000 acres along Lake Champlain with a farm, experimental forest, and baronial house and gardens. Webb dabbled in conservation as well, setting up a 40,000-acre game and timber preserve in the Adirondacks. Martin, a Boston businessman, followed Billings' model when he developed the family farm he inherited in 1902 into a stock gentleman farm where he raised Shropshire sheep and Milking Shorthorn cattle herds. He

¹⁶ The landscape historian Norman Newton defines the Country Place Era in the United States as the period between c. 1870 and 1930 when the design of country places dominated the American architectural and landscape architectural professions (Newton 1971:427).

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

hired architect James T. Kelly to design his Shingle-style manor house and modern agricultural complex and landscape architect Arthur Shurcliff to design the gardens (Foster 2009:135–136; Vermont Division for Historic Preservation 1991).

Conservation and Development on the Billings Estate

The progressive conservation practices Billings implemented on his property, some of the earliest known to follow Marsh's seminal work, distinguished it from other model farms in the state. The initiation of Billings' forestry program on his Woodstock estate in 1874 coincided with the earliest public and private efforts to address conservation through forestry and reforestation in particular. Billings also developed the estate grounds into a model of landscape design that harmonized with nature. His integration of forestry and landscape gardening is one of the earliest examples to illustrate the relationship between aesthetics and sustainability that became a hallmark of American conservation through the early twentieth century.

In March 1869, Billings purchased 246.6 acres of land from George Perkins Marsh's brother, Charles Marsh, Jr., for the sum of \$27,500, including all of the present Mansion grounds except two small, previously subdivided parcels at the southwest corner adjoining North Street. Billings acquired these parcels in April 1869 and September 1872, respectively. He acquired an additional nine lots between 1869 and 1875, for a total of nearly 400 acres. Between 1883 and 1890, he added more than 650 acres, reaching a total of 1,153 acres of land that included hundreds of acres of forest when he died. The current District boundary encompasses 555 of these acres, which correspond to the characteristic domestic and forest-park components of the model gentleman farm. The primary agricultural component lies outside but immediately adjacent to the District boundary. Billings' work on the Marsh place began with improvements to the Mansion, its grounds, and the farm, followed shortly by reforestation and expansion (Nadenicek 2004:4).

The *villa rustica*, or countryside villa, that Billings developed on the Mansion grounds functioned as the hub of the agricultural estate and as both a private and public park. Soon after his purchase, Billings hired Boston architect William Ralph Emerson to enlarge and extensively remodel the 1805–1807 brick Mansion (LCS No. 040538, contributing building). He had all the other buildings on the property torn down or relocated. The 1790 Marsh farmhouse was moved from the present site of the Tennis Court across Elm Street to the western edge of the intervale meadow (outside the District), where it served as the farm manager's residence until the construction of a new farmhouse in 1890.¹⁷ The adjoining Marsh tenant house was relocated about one mile north (also outside the District). Billings added several outbuildings around the remodeled Mansion: a laundry (later removed), a stable (later replaced), and the c. 1870 Coachman's Cottage (LCS No. 040522, contributing building) (Nadenicek 2004:48).

Billings began improvements to the landscape in late summer 1869, while renovations to the Mansion were underway. He mainly oversaw the grounds work but did implement some himself and remained intimately involved down to the smallest details. Billings commissioned Robert Morris Copeland to prepare a conceptual plan for the Mansion grounds. Copeland's 1869 illustrated plan, most likely developed in close collaboration with Billings, covered about 40 acres from Elm Street west across the hill at the foot of Mount Tom to the rear of the Mansion. Copeland returned to Woodstock several times through the early months of 1870, perhaps making revisions or guiding the implementation of his plan.

¹⁷ The 1790 Marsh house is believed to be at the core of the Octagon Cottage, which was given to Elizabeth French Hitchcock in 1953 when the estate of Mary Montagu French was divided (Foulds, Lacy, and Meier 1994:73).

¹⁸ Although he primarily worked out of Boston, Copeland maintained a residence in his wife's hometown of Castleton, Vermont, and visited the state often.

Marsh-Billings-Rockefeller National Historical Park Name of Property

Windsor County, VT County and State

Over the course of the next five years, Billings closely followed the general concept of the Copeland plan and included many of its details in his development of the landscape. Notable changes he made included the creation of a stronger boundary around the property via a perimeter wall and plantings and the substitution of his reforestation program for Copeland's lawn and clumps of trees on the hill. He followed Copeland's recommendations as well when he initiated a seasonal cycle of estate management, with crops tended in the summer and harvested in the fall, cutting and processing of wood conducted in the winter and early spring, sugaring in the spring, and trees planted in April or May. No major improvements occurred on the grounds between the mid-1870s and 1881, while Billings spent much of his time in New York City as president of the Northern Pacific Railroad. Following his forced retirement from that position in 1881, he again devoted a substantial amount of time to his country estate but altered the landscape only slightly (Madison 1999:30, 34; Nadenicek 2004:58).

The initial grounds improvements undertaken by Billings included the construction of a **Perimeter Stone Wall (LCS No. 040517, contributing structure)** from pre-existing pasture walls to retain the raised grade along the Elm and River Street perimeter. Similar to the "ha-has" used on English country estates to keep farm animals off formal grounds, the low wall allowed unobstructed views of the surrounding landscape. Billings extended the wall around the entire grounds over the next eight years. In the fall of 1874 or spring of 1875, he established continuous irregularly spaced plantings of Norway spruce and other trees and shrubs above the wall along Elm and River streets, diverging from the more limited clumps of trees specified by Copeland. Probably intended as a screen, the plantings did not interfere initially with the views out from the grounds because of the downward slope. Between 1876 and 1877, the perimeter plantings were extended west along River Street and north along Elm Street to the bank facing the Thompson place.

By July 1870, work began on the System of Estate Drives (LCS No. 040510, contributing structure), closely following Copeland's circulation plan. Copeland outlined his views on road design in Country Life, stating, "Never curve or distort it merely to gain length, never curve it where it would be better straight, and never make it straight where a curve would have more beauty, or would display the surface to better advantage." He believed that a road or path should "carry one naturally and easily about the whole place in such a way as to display its beauty and open that of the surrounding country" (quoted in NPS 2002a:22). Copeland redesigned the original Marsh entrance lane, creating a formal introduction to the house with a curving naturalistic alignment. The 1870 Main Entrance Drive (LCS No. 040510, historic associated feature) began at a Y-intersection with Elm Street and ended in a teardrop-shaped loop passing under the porte-cochère. The layout of the current drive conforms in large part to its original construction, although the tear-drop loop later became a Neoclassical circular turn-around and the drive was widened. The Mansion Parking Area Stone Wall (LCS No. none, historic associated feature) also dates to the original construction of the Main Entrance Drive, but its current alignment differs slightly from the c. 1870 position. Billings installed the Main Entrance Gateway (LCS No. 040515, contributing structure) specified by Copeland at the foot of the drive, consisting of two granite pylons with highly ornamented wrought-iron gates spanning the drive.

Copeland's plan included the <u>Stable Drive (LCS No. none, historic associated feature)</u>, which initially led from Elm Street north of the Mansion and looped around the west side of the stable to form a Y-intersection with the Main Entrance Drive. The <u>Coachman's Cottage Drive (LCS No. none, historic associated feature)</u> is a short spur that branched off the Stable Drive to access the Coachman's Cottage. The <u>Belvedere Drive (LCS No. none, historic associated feature)</u> and associated <u>Belvedere Drive Retaining Wall (LCS No. none, historic associated feature)</u>, built c. 1872, completed the primary system of estate drives. Lined with widely spaced arborvitae shrubs, the Belvedere Drive led west from

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

the Main Entrance Drive along the north side of the Belvedere to a circular turn-around at the west end of the greenhouses. A service road, North Street Road (LCS No. none, historic associated feature), led west from the turn-around to the gardener's cottage and North Street. Billings surfaced the drives on the Mansion terrace with white gravel and lined them with cobblestone drainage ditches.

Copeland specified the construction of a tri-partite greenhouse, a building type that many wealthy Americans considered an important status symbol in the mid-nineteenth century, on the terrace west of the Mansion. By 1870, Billings decided to add a bowling alley to the greenhouse complex, reflecting the increasing popularity of bowling as a recreational activity among the middle and upper classes. In the winter of 1871–1872, he hired Lienau and Lord to prepare the plans for the complex, which included the additional building later named the **Belvedere (LCS No. 040519, contributing building)**, meaning "beautiful view," as a social space for visitors to the greenhouses and bowling parties. Onstruction of the complex, with the one-story **Bowling Alley (LCS No. 040542, contributing building)** and four one-story greenhouses (later removed or altered) extending west and south from the two-story Belvedere at the northeast corner, finished in the summer of 1873.

The original greenhouse portion of the complex consisted of four greenhouses arranged in a "U" shape connected to the south walls of the Belvedere and Bowling Alley. The Tropical House, or Palm House, extended south from the Belvedere to an eight-sided conservatory known as the Octagon. The Rosary, also called the Hot House, extended west from the Octagon, and the long, lean-to Grapery extended west from the Tropical House along the Bowling Alley. All the greenhouses had curvilinear glass roofs; low brick foundations; and painted wood frames with decorative trim, iron sills and cresting, and panes of lapped glass. The Octagon, "designed as a show house for ornamental plants," measured 34 feet long on each side and featured an entrance porch facing the Mansion and a cupola. Largely due to the topography of the complex's site, the greenhouse design and construction was particularly expensive and required specialized workers from the Lord & Burnham Company. In 1882, Billings decided to enlarge the greenhouse complex by adding a Camellia House and Potting Room, also designed by Lord & Burnham, to the west of the Rosary. Configured like the Rosary, the Camellia House more than doubled the length of the greenhouses that extended west from the Octagon parallel to the Bowling Alley. It attached to the north side of the Potting Room, a small one-and-one-half-story, wood-frame, Stick-style cottage.

To create the Mansion Terrace Designed Landscape (LCS No. none, contributing site) proposed by Copeland, Billings had the area around the Mansion graded to establish a unified Lawn (LCS No. none, historic associated feature) out of the front garden and south pasture. He preserved the mature trees around the Mansion (primarily elms and maples) in part by maintaining the grade immediately around the trunks. By May of 1872, the expansive lawn was sufficiently established for strolling. Billings kept the grass at a short height, shaded in part by tall elms with lawn seats placed beneath them. Evergreen and deciduous shrubs also ornamented the Mansion lawn. The grounds east of the greenhouse complex were also kept as a lawn. South of the greenhouses, Billings terraced the slope down to River Street and maintained it as a meadow of clover and grass. He also maintained the Swale (LCS No. none, historic associated feature) between the stable and the family's croquet ground as meadow that was cut for hay. The croquet ground laid out by Copeland on the site of the first Marsh house was built by June 1872, apparently one of the earliest examples in the country. Recreational fashions changed over the course of the next 15 years, however, and croquet fell out of favor. Between August 1886 and July 1887, Billings

¹⁹ It is unclear when Billings decided to add the Belvedere to the complex, and there is scant documentation for its design and building process (Porter/Miller Ink 2013: Part 1b, 2).

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

had a lawn **Tennis Court (LCS No. 040539, contributing structure)** laid out on the croquet ground site with a fence along the outer edge of the perimeter paths.

Copeland included one summer house, or open-air pavilion, on his 1869 plans. By 1873, the curving Summer Houses Path (LCS No. none, historic associated feature) led through the stone perimeter wall along River Street up toward the Mansion through the Upper Summer House (LCS No. 040528, contributing structure), then past a large boulder and across the lawn, as planned by Copeland. Billings added a second open-air pavilion, the Lower Summer House (LCS No. 040526, contributing structure), along the path below the first in 1874 or 1875. The Mansion-Flower Garden Walk (LCS No. none, historic associated feature), laid out in August 1873 parallel to the Belvedere Drive, initially connected the greenhouse complex to the Mansion. The enlargement of the veranda in 1885 required adjustments to the walkway, and a stone walk was laid from the rear entrance of the Mansion. The paths initially had white gravel surfaces and cobblestone drainage ditches to match the estate drives on the terrace.

Billings established a more informal landscape on the foothill behind the Mansion, where he established his earliest forest plantations on former pastures. Soon after 1869, Billings laid out the kitchen garden on the hillside very closely to Copeland's plan with a series of rectangular plots defined by small roads or paths and a bank of cold frames along the south side and a young sugar maple plantation on the bank along the north side. The family raised a variety of vegetables, flowers, and fruits for their own use. Billings later introduced a tree nursery on the southeast side of the garden and built a shed for garden-related workspace and storage (no longer extant). The overall structure and orthogonal layout of the kitchen garden remained largely intact through the 1870s and early 1880s.

Billings implemented little of the Copeland plan in the portion of the hill outside the kitchen garden. He established a new Woodshed Yard (LCS No. none, contributing site) on the terrace along the north slope of the hill, where construction of the Woodshed (LCS No. 040530, contributing structure) finished in June 1876. Between 1885 and 1888, Billings converted a spring-fed boggy area on the hillside into an ornamental Lily Pond Garden (LCS No. none, contributing site). The garden, which reflected the growing popularity of picturesque wild designs, consisted of two small connected ponds retained by the Lily Pond Dam (LCS No. none, historic associated feature) along the south side of the extant Lily Pond (LCS No. none, historic associated feature). The ponds had tile linings and were planted with water lilies. The Lily Pond Lower Waterfall Bridge (LCS No. none, historic associated feature), a large stone slab bridge, crossed the inlet in the northeast corner of the north pond, and a rustic wooden bridge crossed the narrow neck between the ponds. The Lily Pond Path (LCS No. none, historic associated feature), shown in Copeland's plan, led up the hillside from a stone wall and set of stone steps near the Mansion and extended past the ponds to the kitchen garden.

In addition to the aesthetic grounds improvements, Billings also constructed innovative and expansive underground utilities systems. A reservoir (later replaced) built behind a grove of oak trees on the hillside behind the Mansion supplied domestic water to the house and fed a system of hydrants to water the lawns and gardens. Water came to the reservoir basin through an underground pipe from a spring-fed well on Mount Tom. A network of drains that served as both sanitary and storm sewers emptied into Barnard Brook and the Ottauquechee River. Gas lines connected with the municipal system in the village from a pipe that ran across the Elm Street Bridge and extended to provide gas to lamps along Elm Street as well as along the walks and paths on the grounds.

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

Billings began implementing his innovative experiment in forest improvement on the upland sheep pastures west of the Mansion soon after acquiring the property in 1869 and extended it across Mount Tom in subsequent years. The Mount Tom Forest (LCS No. none, contributing site) is one of the earliest surviving examples of planned and managed reforestation in the United States. Between 1874 and 1890, Billings managed the planting of large plantations of introduced species and groves of native hardwoods, with the total number of trees planted at least in the tens of thousands, a substantial forest size by the standards of the day. He and his heirs established plantation stands on eroded slopes and exhausted pastures to provide timber products, stabilize soils, and enhance the aesthetics and recreational value of the landscape. The oldest plantations, those planted during Billings' lifetime, are located on the eastern portions of the forest within and near the Mansion grounds and along the west side of Mount Tom on Hill Top Farm. Influenced by European planting techniques and contemporary scientific research, these included Norway spruce, white pine, hemlock, white ash, European larch, and sugar maple. In some instances, these older plantations have become naturalized with northern hardwoods and native conifers. The sizable Woodshed Billings had constructed on the property aided the harvesting of timber in the forest and provided space for the subsequent drying of firewood (Nadenicek 2004:3; NPS 2001).

Although some tree planting likely occurred between 1870 and 1873, primarily in the areas closest to the house, the first documented planting is a group of 50 evergreens set out in 1873 on the Mansion grounds. On August 23, 1874, Billings recorded in his diary that 600 evergreens had been shipped from W. C. Strong Nurseries and 100 had arrived and were already set out on the slopes above the newly constructed greenhouse complex (Stand 42b). Erosion control may have been a consideration in planting trees in that location, but it is equally probable that landscape aesthetics played a role. The pattern of planting was naturalistic, in keeping with the picturesque sensitivities of the age. The principal tree species chosen for the site was Norway spruce, a popular tree easily obtained by the 1870s in large numbers from nurseries and known for its straight trunk. Billings pioneered the successful introduction of Norway spruce, among other commercial species, on his farm. Tree planting continued throughout the 1870s, generally in the spring. One acre of Norway spruce may have been planted in 1876, and Billings' diary contains direct evidence of substantial efforts in 1877 and 1879, including approximately 400 evergreens planted on the hillside behind the Coachman's Cottage in April 1877 (Stand 42a). Billings also planted native deciduous and evergreen trees during those years and specifically mentioned replacing dead maples near the reservoir and planting hemlocks on steep banks on the north side of the hill. By the 1880s, the forest plantations created a rustic setting adjoining the lush formal landscape of the Mansion grounds. They formed an integral part of the Billings family's daily life, becoming a favorite spot for strolls and drives (Nadenicek 2004:4-6).

Billings' attention to forest planting ebbed and flowed depending on other preoccupations and his work with the Northern Pacific Railroad. By 1880, he kept extensive farm records and receipts, which indicate a surge in forest planting activity after he left the Northern Pacific presidency in 1881 and especially after the railroad was completed to the West Coast in 1883 and the arrival of Aitken as farm manager in 1884. Several conifer plantations were established in April 1880. Spruce trees were planted near the gardener's cottage and on the Mansion grounds (Stands 46a-46b). There is also evidence of white pine plantings during the same period (Stands 43 and 45). A maple plantation was established near the Spring Lot in 1882 (Stand 33), and Norway spruce planting continued during the 1880s. Many of the mid-1880s efforts were associated with the worn-out agricultural fields and pastures of Hill Top Farm (formerly the Dana Farm), on the western flank of Mount Tom, acquired by Billings in 1884. During those years, the number of trees planted increased from hundreds to thousands: Billings ordered more than 5,000 trees in 1883, more than 10,000 in 1886, 16,200 in 1887, and 3,000 in 1888. Records indicate that 1,000 Norway spruce, 5,000 white ash, and 1,500 European larch were planted in open fields at Hill Top Farm in 1887

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

(Stands 1, 2, and 3a-3b). The method of planting also shifted in the 1880s, likely as a result of the increase in plantation size. Billings sent groups of laborers into the fields to set out his large nursery orders as quickly and efficiently as possible. While his earlier plantations consisted of trees mixed and randomly placed in the landscape in a picturesque style, later ones were generally planted as monocultures on rough grids. A c. 1890 photo taken from the peak of Mount Tom shows maturing hillside plantations, with the most densely forested area on the slope above the greenhouses and few open areas scattered across the hill in addition to the gardens, probably because of rocky ground (Nadenicek 2004:6–7).

Billings ordered trees from across the country: receipts exist for shipments from W. C. Strong Nurseries in Brighton, Massachusetts; Forest City Nurseries in Portland, Maine; and Waukegan Nurseries in Illinois. Other sources of tree seedlings included Reading Nursery in Massachusetts and Shady Hill Nurseries in Bedford, Massachusetts. Before the Civil War, most nursery operations were small and operated locally or regionally. The industry greatly expanded as a consequence of the increased demand for trees created by the railroads as part of their strategy for encouraging migration to the West. Railroads also allowed nurseries to sell their stock nearly anywhere in the country and enabled specialization. Waukegan Nursery was a leader in the propagation and sale of conifers, which may explain Billings' patronage (Nadenicek 2004:7).

The forestry work on the Billings farm was more innovative than many contemporary managed forests. Billings actively replaced degraded or barren areas with new forests and transplanted non-indigenous species to create a different forest, according to the aggressive program advocated by Marsh. The result was a single overall forest of diverse species comprising large stands of single species that were thinned out and extracted regularly. In contrast, Webb's later work at Shelburne Farms involved primarily managing mature forests, transplanting young trees to other parts of the forest, and periodically cutting. The Billings estate became a model of enlightened forestry technique for Vermont and beyond. Sargent's 1884 report on North American forests referenced the solutions to deforestation implemented by Billings in Woodstock, specifically "judicious cutting" of trees and control of livestock and fire. Through his planting, Billings developed a highly cultivated forestry avocation for himself and for the benefit of the community and nation. His work intentionally incorporated scientific experimentation, adjustment, and demonstration. The trees planted under his direction represented a major advance in reforestation practice at the time (Dorman 1997; Madison 1999:46–47; NPS 2001).

Work was underway at the time of Billings' death in 1890 on the construction of the **Pogue Dam (LCS No. 040546, contributing structure)** that converted an existing marshy bog on the former Dana Farm into the **Pogue (LCS No. none, contributing structure)** pond. The natural bog covered about 12 to 15 acres in a deep basin at the foot of a hill northwest of the Mount Tom summit. Billings had the earthen dam built at the outlet of the bog to the Pogue Brook, creating the 14-acre open lake that now exists. The transformation of a "quaking bog and swamp hole of untold depth which swallowed everything that came within its reach without remorse" into a picturesque lake exemplified late nineteenth-century attempts to impose aesthetic improvements on the natural landscape (quoted in NPS 2002a:13). Like other elements of the Billings' designed landscape, the Pogue served a practical purpose as well as a picturesque one. It provided not only water to the estate through a system of pipes established at the beginning of the twentieth century but also ice for the household's essential cold storage. To keep the water clean for consumption, the Pogue was regularly cleared of sediment deposits.

The large <u>System of Carriage Drives (LCS No. 040512, contributing structure)</u> Billings had constructed on Mount Tom between 1869 and 1884 constituted the key component of his landscape improvements in the forest. The roads served many vital utilitarian purposes, including access to remote

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

areas to enable the removal of cut wood and possibly fire breaks. They also offered opportunities to enjoy the local landscape and views of the surrounding scenery. Billings opened the entire road network to the public as a way to fulfill his mission of providing a model of scientific agriculture and forestry, and they became a popular attraction. The local press boasted, "Probably nowhere in the country has private enterprise accomplished anything like these mountain drives, which are not exceeded in extent or picturesqueness by the public drives of Mt. Royal at Montreal. Mr. Billings is pleased to know that his efforts and expenditures in improving and adding to the attractions of Woodstock afford pleasure to the citizens of the valley, and this fact greatly heightens the public enjoyment of the mountain drives" (quoted in NPS 2002a:27). Local residents and visitors formed what newspapers called a "constant throng" (quoted in NPS 2002a:28). Visitors also used the carriage drives as hiking and snowshoeing trails and participated in sleigh riding and skating on the Pogue (NPS 2002a).

The garden road (later known as the Upper Meadow Road [LCS No. none, historic associated feature]) led uphill from the Belvedere Drive to the kitchen garden. Two roads, a short spur connecting the turn-around at the end of the Belvedere Drive with the garden road (the Spur to Garden Workshop [LCS No. none, historic associated feature]) and the north-south road that Copeland laid out through the kitchen garden (the Upper Meadow Through-Road [LCS No. none, historic associated feature]), roughly followed the alignment of an existing road from the Marsh era that originated behind the Mansion and led uphill and through the middle of the hilltop pasture. Billings retained the portion of this Old Mountain Road (LCS No. none, historic associated feature) that led northwest from the north side of the kitchen garden. He also constructed a "new" mountain road (now known as the Pogue Carriage Drive [LCS No. none, historic associated feature]) along the alignment proposed by Copeland that extended from the Stable Drive along the north slope of the hill. The alignment and rustic stone structures of the carriage drives carried the picturesque and naturalistic characteristics of Copeland's plan through the entire estate. Additional components of the carriage drive network constructed before 1884 included an earthen shortcut across the hillside between the Belvedere Drive and the garden road (the Shortcut to Garden Workshop LCS No. none, historic associated feature]) and a road through the Woodshed Yard related to the estate's forestry operations (the Lower Woodshed Road [LCS No. none, historic associated feature]).

By the end of 1884, a substantial network of carriage drives existed on the eastern portion of the estate. That year, following the purchase of an additional 227 acres of land that included the Pogue, Billings began a second phase of road construction to extend the network across Mount Tom. This phase encompassed the Summit Road (LCS No. none, historic associated feature) that ascended the south peak of the mountain to obtain a panoramic view over Woodstock (completed 1887), as well as the Spur to Hill Top Farm (LCS No. none, historic associated feature). Billings intentionally framed a vista across the French Lot (on the south side of the Summit Road) toward the broad valley in the distance with plantations of Norway spruce and European larch. In 1890, he authorized the construction of the Spur to Cemetery (LCS No. none, historic associated feature) to link the garden road to the River Street Cemetery. He also planned the Pogue Loop (LCS No. none, historic associated feature) and the North Ridge Loop (LCS No. none, historic associated feature) before his death. Construction of the latter loop occurred in several phases and included two small inner interim loops, the East North Ridge Inner Loop (LCS No. none, historic associated feature) and West North Ridge Inner Loop (LCS No. none, historic associated feature). Additional roads completed by 1895 were the Summer Pasture Loop (LCS No. none, historic associated feature), the Maple Grove Loop (only the short Portion of Maple Grove Loop [LCS No. none, historic associated feature] lies within the district boundary), McKenzie Road (LCS No. none, historic associated feature), and several connecting spurs: the Spur to Upper Meadow Road (LCS No. none, historic associated feature), Spur to Spring Lot (LCS No. none,

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

historic associated feature), Spur to North Ridge Loop (LCS No. none, historic associated feature), and Spur to East Ridge/Maple Grove (LCS No. none, historic associated feature).

Several of the roads required the construction of Carriage Drive Retaining Walls (LCS No. 040547, contributing structure) for reinforcement; the Upper Meadow Road Retaining Wall (LCS No. none, historic associated feature) and the Woodshed Yard Retaining Wall (LCS No. none, historic associated feature) were constructed during the initial phase. Billings also had unobtrusive Carriage Drive Culverts (LCS No. 040544, contributing structure) constructed of laid fieldstone as needed. His construction foreman Horace C. Lockwood likely executed the stonework on the culverts. Many of the Mount Tom Footpaths and Trails (LCS No. 040511, contributing structure) trails associated with the public and private recreational use of the estate likely existed prior to Billings' purchase of the Marsh property, while late nineteenth- and early twentieth-century documents record the construction of others. The Mount Tom Stone Walls (LCS No. 040548, contributing structure) on the hillsides above and to the west of the Mansion generally relate to late eighteenth- or early nineteenth-century agricultural operations. Typically created when fields were cleared, the walls were used as fences to keep animals away from crops. Billings reused some of them for his landscape improvements and retained others.

The Billings Estate and the Evolution of Conservation, 1890–1997

After Billings' death in 1890, the history of his Woodstock estate reflected the changes that occurred in the American conservation movement during the next 100 years. As the nation and the Billings property under the leadership of the farm manager George Aitken moved into the early twentieth century, a broader base of support developed for the goals and ideals of Billings' experiments. Environmental consciousness expanded beyond the educated and well-to-do to the middle class, and conservation policies began to receive sustained, high-level official attention. At the same time, the concept of genteel leadership declined. Experts, often organized by state or national governments, began to play an increasingly important role in nationwide conservation efforts. The Progressive movement emphasized efficiency, science, and technical expertise. Progressives incorporated surveys, education, and cooperative organizations into many of their reforms, including conservation, which they defined in the early twentieth century as the rational management of resources. Under their direction, the responsible management of untenanted public lands replaced the private stewardship model exemplified by Billings and other wealthy nineteenth-century conservationists. Prominent philanthropists like John D. Rockefeller, Jr. led the way for a new generation of conservationists that included his son Laurance who supported ecology-based environmentalism with an institutional base of well-managed national parks and forests. While Marsh and Billings favored efficient stewardship and viewed nature primarily in relation to its benefits to humankind, twentieth-century environmentalists argued that nature had to be preserved for its own sake. By the 1930s, the federal government funded the conservation of private lands; subsequently, mainstream American environmentalists worked predominantly with governmentcontrolled lands as stewards of private environmental protection (Dorman 1997:54-55; Foulds, Lacy, and Meier 1994:13-16; Madison 1999:4, 50; Nadenicek 2004:13, 65).

American Conservation in the Twentieth Century

The results of Billings' experiments directly influenced many conservation policies and practices implemented during the period from the 1890s to the 1920s known as the Progressive Era. In 1891, Congress authorized President Harrison to establish forest reserves from public land, beginning with the 125,000-acre Yellowstone Timberland Reserve. The 1897 Forest Management Act created the U.S. Forest Service within the Department of the Interior to manage the national forest reserves. By 1898, Cornell

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

University and the Biltmore estate had professional forestry schools, and Yale's was founded in 1900. In the early 1890s, the professional forester Gifford Pinchot began his experiments at George Vanderbilt's Biltmore estate in North Carolina, which became for the nation what Billings' estate was for Vermont. Pinchot received a copy of Marsh's *Man and Nature* on his 21st birthday in 1886; the book, which he called "epoch-making," proved as pivotal to Pinchot's world view as it had been for Billings (quoted in Lowenthal 2001:vii). Pinchot was also familiar with Billings' work, proclaiming in 1893 that it yielded "much information of general value" and was "useful in defining and helping to solve the problems with which American forestry must deal" (quoted in Dorman 1997:41). Like Billings, Pinchot experimented in open areas with European species and managed the forests with the intention of making them profitable. He codified two methods of forest management, both of which Billings used: the Regular High Forest System, which grouped trees by age to allow the harvest of timber to be carried out in a cyclical manner with one group cut each year, and the Selection System, which created a forest of all ages of trees so that lumber could be extracted throughout each year. The more than 86,000 acres of Biltmore plantations (now part of the Pisgah National Forest), much larger than the Billings estate, formed the foundation of the national forestry policy (Lowenthal 2001:vii-1; Madison 1999:47; Nadenicek 2004:3–4).

Between 1897 and 1910, Pinchot articulated much of the vision and outlined the policies of Progressive conservationism at the national level. He and others, impatient with the slow pace of reforestation on private lands, became strong advocates for federal control. President Theodore Roosevelt made conservation one of the centerpieces of his Square Deal reform program. With Pinchot's counsel, Roosevelt greatly expanded the area of the national forests from 46 million to nearly 150 million acres by the end of his term and in 1905 transferred oversight of the national forest system to Pinchot in the Department of Agriculture. In 1911, Congress passed the Weeks Act to create national forests east of the Mississippi (allowing for the recovery of cut-over lands and promoting fire suppression), which directed the federal and state governments to cooperate to purchase private forestlands for incorporation into the system. The first eastern forest established was the Pisgah National Forest in North Carolina in 1916, comprising lands from the Biltmore estate where Pinchot had gotten his start as a forester. By the 1920s, several other eastern forests were added to the national system (Dorman 1997:66–67; Foster 2009:129; Madison 1999:51, 55).

In the post-Progressive era, environmental issues no longer had the comparatively high levels of presidential interest they did under Theodore Roosevelt and, to a lesser extent, Taft and Wilson. During the 1920s, most federal conservation and preservation initiatives originated from within the bureaucracy itself or from private individuals. The philanthropy of John D. Rockefeller, Jr., the heir to the Standard Oil Company empire, contributed significantly to the expansion of existing national parks and the addition of new ones. In 1919, Rockefeller donated lands and roads that became part of the first national park in the eastern United States, Acadia in Maine. Later in the 1920s, Shenandoah and Great Smoky Mountains national parks were also established in considerable part due to Rockefeller's private intercession. In the West, Rockefeller paid for park improvements at Yellowstone, and he started the process of creating Grand Teton National Park through some strategic land purchases. He also donated large sums to the private Save-the-Redwoods League in California (Dorman 1997:74–75).

Various state governments launched their own systems of forest oversight and protection, beginning with the establishment of New York's Adirondack Preserve in 1885 and the first state forests in Pennsylvania in 1897. By the turn of the century, other states set up their own reserves, among them Minnesota (1899), Michigan (1901), and Wisconsin (1903). State forestry boards and commissions with strengthened powers and mandates supervised these new reserves, and most states had at least a single state forester by 1907. In New England, Maine appointed a state forester in 1891, and the other states in the region created

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

the same position between 1903 and 1909. Although the total extent of state forests was small in comparison to the federal National Forest System, these state-level initiatives placed significant areas in the public domain by the 1910s. Pinchot's Forest Service promoted good forestry practices to private owners as well, encouraging reforestation and sustained-yield harvesting. After the 1920s, substantial reforestation occurred in many areas of the United States, especially in post-agricultural regions like New England (Dorman 1997:66–67, 76; McCullough 1995:120–131).

In Vermont, the Billings' farm manager George Aitken became actively involved in various agricultural and forestry outreach efforts throughout the state that encouraged the cross-fertilization of ideas related to the two traditionally separate enterprises. Aitken invited Pinchot to address the Vermont Dairyman's Association in 1904 and gave him a forestry tour from Rutland to Woodstock. He helped to found the Vermont Forestry Association, an advocacy group for stronger state forest conservation policies, the same year. Vermont passed legislation in 1904 appointing a state forest commissioner and establishing a fire protection program. Subsequent laws authorized a state nursery (1906) and established a state forester position and a state board of Agriculture and Forestry (1908). Aitken was appointed a member of the inaugural board and published technical literature on potatoes, manures, forestry, and cow breeding in several state journals. The Vermont Forestry Association held its 1909 summer meeting at the Billings property, recognized as "perhaps the best opportunity in Vermont for an examination of the methods and results of forest planting" (quoted in Auwaerter and Curry 2005: Volume I, 109). Other states also looked to the Billings plantations for ideas. The Massachusetts state forester Frank William Rane began a large plantation of Norway spruce in 1909, and the state of New York mentioned Billings' work in a 1909 circular on re-forestation (Foster 2009:135–137; Madison 1999:55; Nadenicek 2004:65).

After the establishment in 1909 of Vermont's first state forest, the L. R. Jones State Forest in Plainfield, a network of state forests grew as private landowners like Battell donated large tracts of woodland to the state for public use. By the 1920s and 1930s, the state widely acknowledged reforestation as one of the best means to improve economic conditions in rural communities. By the late 1930s, over 27,000,000 trees had been planted in the state. The Vermont Forest Service became a separate state government agency by 1923, and the legislature created an official state park system in 1929. Vermont's municipal forestry program lagged behind other New England states like Massachusetts and New Hampshire. Massachusetts passed enabling legislation for town-owned and managed woodlands in 1882; Vermont's enabling legislation was enacted in 1915. A 1945 amendment to the law reimburses towns for half the price of land acquired for forests. After 1960, Vermont's municipal forestry program surpassed those of its neighboring states. Tree-planting in Vermont and New England reached an annual high in the 1950s, then declined significantly by the mid-1960s as a result of public demand for open space preservation and wilderness preserves. Vermont's forest cover reached 80 percent by the 1990s (Dorman 1997:76; Foster 2009:135–137).

Between 1910 and 1950, agriculture diminished in Vermont (the portion of the state devoted to farmland dropped from 79 to 59 percent) and tourism became increasingly important to the economy. As automobile transportation improved, rural villages like Woodstock became more accessible to middle-class tourists, who added a new dimension to the state's resort economy. The number of country estates in Woodstock grew around the turn of the century, but most remained modest in comparison with the Billings estate. A visitor in 1891 observed that Woodstock was "a village of homes, and inhabited largely by retired business men, or other people who have ample means to live upon" (quoted in Auwaerter and Curry 2005: Volume I, 106). In 1905, the local journal, *Spirit of the Age*, noted the Woodstock Country Club's planned expansion as helping to facilitate the "salutary habit which is growing in Woodstock of

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

purchasing small suburban sites for cottage or amateur or real farming" (quoted in Auwaerter and Curry 2005:Volume I, 107).

Woodstock remained a desirable location for country homes in the economic prosperity of the 1920s due in large part to its historic charm and natural scenic beauty. In 1918, 20 millionaires purportedly lived in and around the village. By 1931, the Vermont Commission on Country Life noted the diversification of seasonal homes in the state as a whole, which varied "from little shacks used as fishing camps, hunting lodges or inexpensive cottages, to extensive and costly estates owned by persons of large wealth" (quoted in Auwaerter and Curry 2005:Volume I, 148). Interest in the region's recreational opportunities also increased. The first ski tow in the United States was opened in Woodstock in 1934, and within six years, the town had 10 such tows. Woodstock soon became known as the cradle of the winter sports industry, making the village a year-round tourist destination. By the late 1930s, Woodstock had three hotels, several small inns, and many tourist homes.

When Mary French Rockefeller (Frederick Billings' granddaughter) inherited a large portion of the Billings estate in 1954, Woodstock, like many places in Vermont, remained a small village surrounded by rural countryside, little changed from previous decades except for the growth of winter sports, road building, and the continued decline of the agricultural economy. The post-World War II economic boom and rapid growth of automobile-based culture and interstate highway systems soon brought drastic changes to the state, however. In Woodstock, construction of new commercial buildings and second homes increased, even though the year-round population remained below its 1840 peak. Unlike the concentration of earlier summer residences near villages, the second homes of the 1950s and 1960s typically were dispersed across the landscape, often with little connection to existing communities. New commercial development followed a similar pattern, strung out along US Route 4. Spending their summers and other times of the year with friends and family in Woodstock, Mary and her husband Laurance became attuned to these changes, and they began to take an active part in shaping the village's future. For them, Woodstock's natural environment, rural setting, and historic architecture combined to produce an exceptionally beautiful and characteristic New England village. They felt that Woodstock's uniqueness had to be preserved and considered its attributes as keys to the community's economic future. The Rockefellers hoped that preservation of their estate might operate in synergy with the historic village, its scenic setting, amenities, and recreational resources to sustain the tourism basis of Woodstock's economy. Their work resulted in the establishment of Billings Farm & Museum in 1983, operated by the non-profit Woodstock Foundation, and Marsh-Billings NHP in 1992, a public-private partnership that exemplified twentieth-century conservation.²⁰

Post-Billings Estate Development

Because his conservation philosophy encompassed both the use and protection of natural resources, Frederick Billings put into place mechanisms to ensure the long-term care of the forest he established on his estate. He left specific instructions in his will for the care and management of the entire Woodstock property. He transferred ownership and control of the family homes in both Woodstock and New York City to his wife and children, "as the common estate of all," an unusual course of action in late nineteenth-century society. He even specified that bequests to his daughters not be subject to their husbands' control, reflecting the strong personalities of his daughters and their relative youth (none were yet married at the time of his death). Billings also included a clause stating that the property should be

²⁰ The Woodstock Foundation also maintains an endowment for the preservation and maintenance of Marsh-Billings-Rockefeller NHP.

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

"maintained and improved out of my general estate until a division among the heirs takes place" (quoted in Auwaerter and Curry 2005:Volume I, 101). The will outlined the need for continued and progressive improvements to the Woodstock property through the purchase of additional land and the development of new roads, new plantations of trees, and new buildings as needed, even suggesting future land purchases. It also specified that the portion of property west from Elm Street to Mount Tom (essentially the Mansion and the surrounding grounds) not be sold. In addition to providing a guide for the management of the estate during his wife Julia's lifetime, Billings' detailed instructions were intended to ensure the perpetuation of his vision in the more complex situation of a divided estate after her death.

Immediately following his death, Billings' eldest daughter, Laura, assumed supervision of the property. Until her marriage to Frederick Lee in 1901, she worked closely with the family's trusted farm manager, George Aitken, and an estate trustee acting as comptroller to manage the property. In 1906, Laura and Frederick Lee built their own summer estate farther north on River Road. Two other daughters, Mary Montagu and Elizabeth, managed the Mansion grounds and, after Laura married, most of the forest and farm for their mother. Mary Montagu married John French in 1907 but continued to spend her summers at the family mansion. Elizabeth Billings, the youngest daughter, never married and shared the New York City and Woodstock homes with her mother until Julia's death in 1914. The Billings' two surviving sons, Frederick Jr. (Fritz) and Richard, apparently did not become very involved in the management of the estate. Richard, the youngest, married in 1898 and built a residence on property north of Barnard Brook. Fritz married in 1912 but died the following year. When Julia Billings died on February 17, 1914, the Woodstock estate was divided among the surviving Billings children. Laura and Richard received the portions where they had developed their own summer homes, which in Richard's case included the main farm operation on the Ottauquechee River intervale. Mary and Elizabeth acquired joint ownership of the Mansion grounds and the adjoining Mount Tom lands.

In the period immediately following Frederick's death, the improvements his heirs made to the estate were concentrated in the area surrounding the Mansion. Julia Billings' nephew Ehrick Kensett Rossiter, a New York architect, designed the <u>Stable (LCS No. 040521, contributing building)</u> constructed in 1895 to replace the smaller c. 1869–1870 Billings stable on the same site. The extant <u>Hitching Post (LCS No. 040543, historic associated feature)</u> located near the main entrance to the Stable likely dates to the building's construction. Julia worked with her daughter Laura to introduce a more contemporary aesthetic to the Mansion landscape and gardens. Between 1894 and 1898, the family added formal neoclassical gardens to the terraces below the greenhouse complex. While Laura oversaw the planning and construction of the gardens (with assistance from Aitken), surviving documentation indicates that the landscape architect, architect, and artist Charles A. Platt prepared the detailed designs for the <u>Flower Garden (LCS No. 040514, contributing site)</u> and the <u>Long Terrace (LCS No. none, contributing site)</u>.

Construction of the Flower Garden began with grading of the stepped terraces in the fall of 1894. By April 1895, a perimeter hedge of hemlock enclosed the garden and the stone Flower Garden Retaining Wall (LCS No. none, historic associated feature) retained the embankment on the north and west sides. Work had also begun on the Flower Garden Walks and Steps (LCS No. none, historic associated feature): perimeter and cross-axis gravel paths and stone steps at the east and west ends and in the northeast corner. The garden was planted for the family's seasonal arrival in May 1895 with a wide range of old-fashioned flowering plants, such as pinks, larkspur, hollyhocks, iris, peonies, phlox, gas plant, and roses along the walls. Low privet or barberry hedges were added along the edges of the beds before the following season, as well as the Flower Garden Benches (LCS No. none, historic associated feature), two stone benches located at either end of the north-south cross-axis walk. A bronze sundial on a granite

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

<u>Sundial Base (LCS No. none, historic associated feature)</u> stood at the center of the garden until the installation of the antique, white-marble <u>Italian Fountain (LCS No. none, contributing object)</u> in the spring of 1899. By this time, the plantings and low hedges in the garden had matured, and the perimeter hemlock hedge was beginning to fill in.

With most of the work on the Flower Garden done by the fall of 1896, planning began for construction of the second phase of the terrace gardens, the Long Terrace. While it was conceptualized as part of the initial garden design, Platt apparently did not work out the details of the Long Terrace until 1897. Work began in the fall of 1897, and most of the construction was finished in time for the family's arrival in July 1898. The original circulation designed by Platt for the Long Terrace (a portion of which remains as the Long Terrace Walks and Steps [LCS No. none, historic associated feature]) consisted of two 400-ft walks: a main walk that extended on axis with the center of the Flower Garden to the east and a vista of Mount Tom to the west, and a lower walk that extended from the south walk of the Flower Garden. Two sets of stone steps, one in the middle cross axis and one at the west end, connected the walks. Platt also designed the white-painted neoclassical wooden Long Terrace Bench (LCS No. none, contributing object) with volute arms for the end of the main walk and a second bench without volutes (no longer extant) for the top of the center cross-axis walk. An existing grove of evergreens, including a prominent white pine on axis with the walk, terminated the main walk behind the bench, and the distinctive double peaks of Mount Tom rose in the distance behind the white pine. Plantings on the Long Terrace followed a mix of formal beds, clipped hedges, and old-fashioned plantings similar to the Flower Garden. Narrow beds consisting of cylindrically shaped arborvitae shrubs interspersed with roses lined the main walk. A flower border ran the full length of the lower walk, with a mixed perennial bed on the north side and a bed of peonies on the south side bordering the hemlock hedge. The sundial installed temporarily in the center of the Flower Garden was moved c. 1899 to the upper walk in front of the bench at the cross-axis steps.

During the same period as the creation of the terrace gardens on the Mansion grounds, Elizabeth Billings, with the help of farm staff, family, and friends, expanded her father's rustic landscape on the hill behind the Mansion into a collection of wild and botanical gardens. By the 1890s, Frederick Billings' forest plantations on the hillside had matured into a wooded landscape of Norway spruce, hemlock, and white pine with an understory suitable for planting. Elizabeth focused her initial hillside garden efforts on the creation of a Fernery (LCS No. 040513, contributing site), which she may have begun planting as early as 1883. In the fall of 1893, she laid out the winding Fernery Path (LCS No. none, historic associated feature) through the herbaceous woodland plants and mosses and exposed rock outcroppings. By late spring of 1897, she had the Fernery Watercourse (LCS No. none, historic associated feature) constructed on the steep slope to improve growing conditions and add visual interest. The pipe-fed stream cascaded down the rocks into a series of four naturalistic pools. Elizabeth continued to plant the Fernery with specimens collected from the local woods interspersed with exotics brought from trips to Tennessee, Canada, and the Far East and carefully identified them all with zinc labels. Between 1897 and 1899, she laid out the Upper Hillside Path (LCS No. none, contributing structure) extending west from the Fernery along the southern and eastern rim of the hill, placing a Brownstone Bench (LCS No. 040518, contributing object) along the west side of the path. She added the Arboretum Path (LCS No. none, contributing structure) in 1899 that led north from the existing Lily Pond Path above the Stable and Coachman's Cottage, continued in an arc around the north slope of the hill, and ended at the northeast corner of the kitchen garden. Elizabeth developed an arboretum (a botanical garden of trees), of which only a remnant remains, along this path. She also established two smaller gardens, one devoted to mushrooms and one to grasses. Although likely on the hillside, their exact locations are unknown. Elizabeth often showed visitors the mushroom garden along with Fernery, suggesting that it was perhaps in an adjoining wooded area. The grass garden would have been located in a sunny clearing.

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

By the mid-1890s, the repair work required to maintain the estate's aging greenhouses had become overwhelming. In 1900, the Billings family decided to rebuild the Tropical House, Rosary, and Octagon "of iron and glass, instead of wood and glass, and...of more modern design" (*Vermont Standard* 1893, quoted in Auwaerter and Curry 2005:140). Lord & Burnham worked primarily with Laura Billings to prepare the plans for the white-painted wrought-iron greenhouses with wooden glazing bars that had become their standard product. The work was underway by mid-October 1900 under the supervision of Julia's nephew Ehrick Rossiter, and the three new greenhouses (later demolished) were completed by the spring of 1901. In October 1902, Lord & Burnham rebuilt the Grapery, later known simply as the Greenhouse (LCS No. 040524, contributing building), with a rectilinear iron frame and removed the Camellia House and Potting House.

During the summer of 1901, Elizabeth improved the Lily Pond Garden established by her father on the hillside in the 1880s into a water garden. She expanded the inlet at the northwest part of the north pond into the Lily Pond Waterfall (LCS No. none, historic associated feature), which brought water from the Pogue down to a rock ledge and through a small gorge beneath the existing stone-slab bridge. The new Lily Pond Waterfall Path (LCS No. none, historic associated feature) wound up alongside the waterfall and crossed the upper level via a second stone-slab Lily Pond Upper Waterfall Bridge (LCS No. none, historic associated feature). Elizabeth collected plants for the renovated Lily Pond Garden as she did for the Fernery.

Mary Montagu Billings took the lead on the family's early twentieth-century redesign of the Mansion entrance drive, probably made to provide a stylistically up-to-date approach to the Mansion in keeping with other recent improvements. Mary contacted the Boston landscape gardener Martha Brookes Hutcheson in September 1902, when the latter was just beginning her career. Hutcheson reconfigured the vehicular and pedestrian approaches to the Mansion in a more rational, neoclassical manner. She redesigned Copeland's tear-drop-shaped loop at the end of the Main Entrance Drive into a circle that separated the rear service area from the entrance, in the process improving the circulation pattern for the automobiles that were just coming into use. The family decided to implement most of her proposed design, with the exception of a new pedestrian path paralleling the Main Entrance Drive. Aitken and Hutcheson oversaw the construction that took place from the fall of 1903 to June 1904. The improvements included the removal of the ornamental iron gates at the Main Entrance Gateway and the removal of curvilinear paths bordering the veranda. The widening of the head of the Main Entrance Drive from 10 to 18 ft in 1912 (likely to accommodate automobiles) required some alterations to the stone perimeter wall as well as the relocation of the granite gate posts, which were raised about three feet out of the ground and topped with ornamental iron lanterns.

Elizabeth Billings also enlisted Hutcheson to help plot a road or path through her wild gardens in 1904. Wood Drive (LCS No. none, historic associated feature), as Hutcheson called it, wound from the Belvedere through the Fernery to the Lily Pond and then turned west to the kitchen garden. The rustic stone Wood Drive Retaining Wall (LCS No. none, historic associated feature) lined a portion of the drive, and a set of stone steps through the wall (the Wood Drive Stone Stairway [LCS No. none, historic associated feature]) led a short distance to a rustic Stone Ledge Bench (LCS No. 040518, contributing object) beneath the shade of a massive old oak.

The family made several additional improvements on the Mansion terrace prior to Julia Billings' death in 1914. They replaced the c. 1870 reservoir that served as a water source for the hillside gardens in 1907 with the current Reservoir (LCS No. 040529, contributing structure), now abandoned. Farm staff built

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

the <u>Garage (LCS No. 040523, contributing building)</u> in July 1908 to house the family's automobiles in a fireproof building away from the animals in the Stable. In 1913, the family had a swimming pool constructed amid the hillside botanical gardens. The rectangular concrete pool (filled or capped with concrete in 1931) covered the south lily pond and was enclosed by a pipe and mesh fence.

Billings' heirs added few improvements to the Mount Tom portion of the estate after his death, but they continued to maintain the extensive network of carriage drives he had planned and constructed. The roads remained open to the public through the 1890s and early twentieth century, with the exception of the sections nearest the Mansion that were closed on Sundays. A record in the Billings Farm Memo Diary for May 1899 notes the placement of water troughs near the Pogue, likely referring to the existing Stone Water Trough 1 (LCS No. 040545, contributing object) and Stone Water Trough 2 (LCS No. 040545, contributing object). Additional trails and bridle paths were added, including a bridle path to the north peak of Mount Tom built in 1896. By 1928, trails and bridle paths provided access to almost every part of the mountain.

Forestry efforts on the estate slowed for a short period after Billings' death, but the farm manager Aitken competently directed the continuing maintenance of the pioneering reforestation program. He supervised the establishment of extensive new forest plantations across the west side of Mount Tom (Stands 12, 18, 27, and 40) and in other areas and new land acquisitions that brought the estate to approximately 1,326 acres at its height in 1901. Aitken increased the purchase of local and imported trees from state nurseries (including white pines, maples, decorative trees, and other species). He also harvested lumber from the forest for use on the farm and for sale to the surrounding locale and thinned and removed poor or infested plantations. The farm's success with Norway spruce induced the International Paper Company to establish a nursery for the propagation of seedlings. Aitken also oversaw the expansion of the farm's livestock program, essentially transforming the farm operation from a gentleman's showplace to a working experimental farm that gained wide renown. Local agricultural presses covered the farm's activities, and the Billings dairy cattle herd received top honors at the 1893 World's Fair in Chicago (Madison 1999:52–53; Nadenicek 2004:65).

George Aitken died suddenly in 1910, and his brother James took over as manager of the Billings farm. James was not as successful, however, and by 1914, the farm faced financial losses. Cyclical periods of productivity and stasis characterized the period between 1914 and 1954, when the estate lost much of its purpose as a model farm and dropped out of the forefront of scientific agriculture and forestry. Forestry operations declined, but harvesting of timber and firewood remained steady. Some white pine and Norway spruce plantations date to this period (Stands 28, 35a-35b, and 41). 1917 plantations of red pine (Stands 17 and 26) and Scots pine (Stand 16) on the former McKenzie farm west of the Pogue and Scots pine/mixedwood (Stand 25) along the northwest side of the North Ridge Loop constituted the last substantial plantation activity until the 1930s, when two acres of Scots pine were planted (Stand 22). Following the onset of the Great Depression in the 1930s, Elizabeth and Mary sold most of the farm's dairy herd. When the Windsor County Fair ended in 1932, they bought the 50-acre fairgrounds adjoining the main farm. After the newest farm manager retired in 1943, the women rebuilt the farm as a commercial dairy, hiring a professional farm advisory firm. The dairy operation re-opened officially in 1948 (NPS 1999:443; Madison 1999:64).

Throughout the early twentieth century the estate remained a seasonal home for Elizabeth Billings and Mary Montagu Billings French, who both lived in New York City during the rest of the year. With the help of the estate gardeners and farm staff, Elizabeth and Mary continued the family's tradition of stewardship for their estate. The two women primarily maintained the landscape as it was, however,

Marsh-Billings-Rockefeller National Historical Park Name of Property

Windsor County, VT County and State

rather than continually improving it. In 1917, Mary commissioned architect H. Van Buren Magonigle to design the <u>Bungalow (LCS No. 040520, contributing building)</u> as a personal retreat on her portion of the family estate. Mary had earlier provided input to George Aitken on the design for the stone Golf House built in 1901 on land north of Barnard Brook. She used that building often for activities related to golf and as a place for informal entertaining and socializing with her friends until her brother Richard inherited it in the division of the estate after their mother's death in 1914. Magonigle, the architect for Mary and her husband's c. 1910 weekend house in Greenwich, Connecticut, designed a rustic, one-story Craftsman-style house similar in size and design to the Golf House that he called a "bungalow" for the <u>Bungalow Clearing (LCS No. none, contributing site)</u> (Porter/Miller Ink 2013:Part 1b, 85–90).

Beginning in the 1930s, the family's stewardship continued with limited means and the landscape was gradually simplified. The Billings daughters decided to replace most of the sprawling greenhouse complex, costly to maintain and only partly used by this time, with the current **Swimming Pool (LCS No. 040540, contributing structure)**. Demolition of the Octagon, Tropical House, and Rosary began in July 1930, leaving only the Grapery, which was adequate for the estate's ongoing gardening needs, from the original 1873 greenhouse complex. The Hegeman-Harris Company of Boston completed the new pool, built between the foundations of the Octagon and Tropical House, by May 1931. The pool originally featured a perimeter concrete walk and pipe-and-mesh fence and a diving board against the Belvedere. The Rosary foundation was removed and the site seeded as lawn, and a **Cutting Garden (LCS No. none, contributing site)** was established along the south side of the Grapery, which became known as the Greenhouse.

After Elizabeth Billings' death in 1944, the hillside gardens became overgrown and the water lilies gradually died out. The terrace gardens also declined in the late 1940s. Mary Montagu Billings French hired Carl Bergstrom, professional horticulturalist, in 1949 to serve as head gardener for the Mansion grounds, a position he filled until 1991. Bergstrom began to revive the Flower Garden and the formal grounds around the Mansion and minimally maintained the kitchen garden but left the hillside gardens largely untouched.

Elizabeth Billings' will, settled in 1948, divided her half-interest in the Billings estate five ways among her sister Mary Montagu French, Mary's three children, and the Town of Woodstock. After Mary Montagu's death in 1951, her Woodstock property was in turn divided among her three children, resulting in each of them holding one-third interest in the Billings estate, excepting the interest held by the Town. Lengthy discussions over the next few years resulted in the subdivision of the core of Frederick Billings' Woodstock property among several owners by 1954. The three French children agreed to give 136 acres on the north and south peaks of Mount Tom to the Town of Woodstock for use as a public park in memory of their mother (the present-day Billings Park).²¹ Mary French Rockefeller inherited 74 acres of the estate that included the Mansion and its grounds. Her brother, John French, received 122 acres at Hill Top Farm to the west; her sister, Elizabeth French Hitchcock, received a small lot across Elm Street (Route 12) to the east containing the Octagon Cottage. The remainder of the former Billings estate, consisting of over 500 acres that included the Billings Farm and Dairy and additional forest lands on Mount Tom, became the property of a private corporation (Billings Farm, Inc.) established and held in common by the three heirs. Mary French Rockefeller and her husband, Laurance, began spending summers at the Mansion in 1961. From that time until her death in 1997, Mary stayed at the property for approximately six weeks of each summer (and briefly at other times throughout the year), while Laurance

²¹ This conveyance would have satisfied the interest given to the Town by Elizabeth Billings, whose will also donated to the Town of Woodstock 21 acres that she had acquired since 1908 on Mount Peg to the east for use as a public park (Auwaerter and Curry 2005:Volume 1, 164; Waite 2014).

Marsh-Billings-Rockefeller National Historical Park Name of Property

Windsor County, VT County and State

shuttled between New York City and Woodstock on the weekends. Together, the couple carried on the tradition of conserving the property according to the values promoted by George Perkins Marsh and the practices established by Frederick Billings.

Immediately upon acquisition of the property, the Rockefellers hired New York City architect and interior designer Theodor Carl Muller to plan updates. In 1956, they demolished the laundry building behind the Mansion, which according to Muller lacked character and had outlived its usefulness, and constructed in its place the <u>Mansion Parking Area (LCS No. none, historic associated feature)</u> with room for approximately eight cars. The project required rebuilding and realigning the associated stone retaining wall and adding a brick wall to screen the service entrance on the kitchen wing of the Mansion. Muller designed the <u>Garden Workshop (LCS No. 040527, contributing building)</u> attached to the west end of the Greenhouse c. 1956.

The Rockefellers converted most of the kitchen garden behind the Mansion to a pasture called the <u>Upper Meadow (LCS No. none, contributing site)</u>, where they had the <u>Horse Shed (LCS No. 040525, contributing building)</u> (also designed by Muller) constructed in 1961 for Mary's horses. The Rockefellers also enclosed a portion of the meadow adjacent to the shed with the split-rail <u>Upper Meadow Corral Fence (LCS No. none, historic associated feature)</u> and gates at either end of the through-road. They retained a small vegetable garden plot maintained by Bergstrom. By the time the Rockefellers acquired the property, the Woodshed was no longer used for the timber industry. Therefore, the family removed the adjoining saw shed and cleared the adjacent yard of timber materials, reclaiming the space as meadow.

Between 1954 and 1970, Laurance and Mary Rockefeller sensitively rehabilitated the estate grounds, retaining many of the Victorian and early twentieth-century features implemented by Frederick Billings and his family and updating others. They engaged the landscape designer Zenon Schreiber to coordinate the improvements. Schreiber left the lawn, plantations, specimen trees, drives, and perimeter enclosures developed originally by Billings intact. However, he created a more open and simplified feeling internally by removing some paths, shrubs, and hedges, including the large deciduous shrubs around the front and sides of the Mansion and lining the Main Entrance and Belvedere drives, the gravel paths around the Mansion, and the cobblestone ditches along the drives. Under Schreiber's direction, head gardener Bergstrom and others replanted trees and shrubs on the lawn and around the Mansion foundation. The three extant Roadside Lampposts (LCS No. 040516, historic associated features) on the grounds date to the late 1950s.

The Rockefellers made more substantial changes to the plantings in the terrace gardens, although the overall layout remained as Platt designed it. They removed the overgrown perimeter hedges around the Flower Garden and along the east end of the Long Terrace; the low hedges framing the Flower Garden beds; and the line of cylindrical hedges, walks, flower beds, and the middle stone steps from the Long Terrace. They retained the Platt bench and adjoining stone steps at the west end of the terrace, which appeared as an open, sloping lawn. In the late 1960s, Schreiber and Bergstrom rehabilitated Elizabeth Billings' naturalistic hillside gardens and paths. Improvements consisted of the repair and reconfiguration of the cascading watercourse in the Fernery (known to the Rockefellers as the Waterfall Garden) and the diversification of the plantings from the original stock of ferns. Bergstrom also revived the Lily Pond Garden with new water plants such as iris and a variety of woodland plants along the banks.

Additional landscape updates on the grounds consisted of enhancements to the area around the Swimming Pool. Initial changes designed by Schreiber in collaboration with the Rockefellers' architect Theodor

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

Muller included the removal of the perimeter fence and the construction of the <u>Pool Patio (LCS No. none, historic associated feature)</u>, a small Catskill bluestone patio between the pool and the Belvedere, and the <u>Pool Patio Brick Walls and Barbeque (LCS No. none, historic associated feature)</u>, a curved-top brick retaining wall against the Greenhouse and brick barbecue built into the adjoining grade. By 1962, the pair completed plans for a more thorough renovation of the "Belvedere-Pool Entourage," as Muller titled the plans. The enlarged <u>Pool Terrace (LCS No. none, contributing site)</u> encompassed the pool patio but extended around the pool, supported by a rusticated stone <u>Pool Terrace Wall (LCS No. none, historic associated feature)</u> with a steel <u>Pool Terrace Railing (LCS No. none, historic associated feature)</u> that concealed the exterior pool walls and echoed the existing low stone wall around the Flower Garden. Grassy slopes and the stone <u>Pool Terrace Steps (LCS No. none, historic associated feature)</u> transitioned the grade of the terrace to the lawns on the west and east sides. The Rockefellers placed the <u>Baigneuse Drapée (The Seine) Sculpture (LCS No. none, contributing object)</u>, a bronze casting of a large figurative sculpture by Aristide Maillol, on the former main walk of the long terrace to serve as a focal point along the axis of the Pool Terrace Steps.

The lawn west of the Swimming Pool was further altered in 1968–69 by the installation of a nine-hole Putting Green (LCS No. none, contributing site), designed by the noted golf-course architect Robert Trent Jones, and the associated Putting Green Wall (LCS No. none, historic associated feature). The Rockefellers added the Cutting Garden Walks (LCS No. none, historic associated feature) to the smaller Cutting Garden. Schreiber added the Putting Green Rock Gardens (LCS No. none, historic associated feature), and Flower Garden Rock Gardens (LCS No. none, historic associated feature); rock gardens were a trademark of his landscape designs and a popular feature in the mid-twentieth century.

Billings Farm and Dairy prospered during the 1950s and 1960s under the management of Harold Corkum. The farm produced milk from its own herd of Jersey cows and bought milk from other herds, which it bottled and made into a variety of dairy products that were well known in the Woodstock area. In addition to the dairy, Billings Farm also continued to manage the forest plantations on Mount Tom; in 1956, these became the first tree farm in Vermont to participate in the American Tree Farm System. Two existing Norway spruce and red pine plantations (Stands 4 and 13) date to the early 1950s. In keeping with broader trends in Vermont forestry, however, reforestation on the estate diminished in the 1950s. The forestry profession broadly advocated and practiced "multiple-use" forest management, which echoed the Rockefellers' conservation philosophy. Management of the Mount Tom Forest transitioned to the maintenance and enhancement of the health and productivity of plantations and naturally regenerated stands. Laurance and Mary hired a professional forester to assist with the stewardship of the property. They also expanded recreational activities in the forest. Throughout their tenure, the Rockefellers and Billings Farm, Inc. continued the family's long tradition of allowing the public free access to and use of the system of carriage roads and trails throughout the forest, and Billings Farm also welcomed local visitors to the farm operation.

In June 1967, Lady Bird Johnson, Laurance Rockefeller's ally in national beautification and outdoor recreation efforts, came to Woodstock to designate the Mansion a National Historic Landmark for its significance in the history of American conservation as the boyhood home of George Perkins Marsh. The First Lady also designated other landmarks and federal undertakings in the area during her visit, but the Rockefellers no doubt encouraged this designation for the Mansion, which identified it as worthy of preservation. They sensed the potential of the estate to enhance the tourism base of Woodstock by attracting visitors to its historic farm, mansion, and Mount Tom forest. In 1968, the Rockefellers created the Woodstock Foundation, Inc. "to preserve and enhance the physical, cultural, and spiritual

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

environment of the people of the State of Vermont, and of the United States of America, and primarily of the Town of Woodstock and the area comprising the watershed of the Ottauquechee Valley" (quoted in Auwaerter and Curry 2005:Volume I, 175).

With the decline of Billings Farm, Inc. as a profitable agricultural operation in the early 1970s, an opportunity emerged for Laurance and Mary to pursue their vision for the preservation and development of the entire Woodstock estate, including the Mansion, the forest, and the farm. The shareholders (all Billings' descendants, including Mary Rockefeller) agreed to sell the corporation, including the main farm on the Ottauquechee intervale and the forest on Mount Tom, to Laurance Rockefeller in 1974. The purchase thus brought much of the historic core of Frederick Billings' estate into Mary and Laurance Rockefeller's ownership. Laurance hired a new farm manager, a well-known Jersey cattle breeder named James R. "Bob" Lord, who, over the next two decades, brought the farm much success, once again earning national distinction for its Jersey herd and carrying forward its historic role as a model of Vermont agriculture. Laurance and Mary also hoped that the farm would become a vehicle for the preservation of Vermont's rural heritage and serve as an effective tool for public education in agriculture, conservation, and history. The couple then began to develop plans for the estate's future stewardship and role as an educational and economic resource.

The Woodstock Foundation took the first step toward these goals even before Rockefeller's purchase of the farm. In 1972, it initiated the Vermont Folklife Research Project, a research and collecting effort to study and preserve vanishing remnants of traditional farm life in East Central Vermont. The project was housed in the Stable on the Mansion grounds from 1977 to 1983. Early in the course of the project, the Foundation set the goal of establishing a permanent museum. It explored concepts such as an open-air folk museum, a working water-powered mill, an interpreted operating dairy farm, and nature trails and carriage rides, as well as the preservation and interpretation of the Mansion as a historic house museum. Through the late 1970s, the Woodstock Foundation engaged a number of leading museum professionals to help the folklife project assess what form of interpretive institution would be most appropriate for Woodstock. By 1980, the Foundation had hired Design & Production, Inc. to develop plans for a permanent exhibition, "The Vermont Farm Year in 1890," to be housed in four renovated barns at the main farm. The exhibit became the interpretive centerpiece of a working farm museum at Billings Farm.

In 1983, the Foundation opened Billings Farm & Museum across Elm Street, which supplanted the Folklife Research Project. The new venture combined the "Farm Year" exhibits developed out of the work of the folklife project with the Rockefellers' revived operating dairy farm, which they continued to own. Together, these interpreted Vermont farm life around 1890 (the year of Frederick Billings' death), as well as contemporary dairying practices. In the late 1980s, the museum restored the farm manager's house to its original 1890 appearance as a living-history facility for interpretation of the Frederick Billings era. This furthered the treatment of the farm as a historic site. Soon after, the Rockefellers donated the farm property and operation to the Woodstock Foundation, which led to the merger of the farm with the museum and full development of the farm's educational mission. Under Billings Farm, Inc. and the Rockefellers, the plantations and other hardwood and mixed forest stands on the estate continued to be managed through the end of the twentieth century for aesthetic and recreational purposes and for timber products and firewood (Auwaerter and Curry 2005:Volume I, 177).

The creation of the Vermont Folklife Project offices in the Stable and the opening of Billings Farm & Museum increased public use of the estate grounds and adjacent properties that prompted some alterations to the landscape. In 1977, the Rockefellers had the simple, brick Mansion Garage (LCS No. 040541, contributing building) constructed closer to the house, at the south end of the Mansion Parking Area.

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

Bryan J. Lynch, a RockResorts landscape architect, designed an addition to the system of estate drives: the <u>Secondary Entrance Drive (LCS No. none, historic associated feature)</u> constructed between September and November 1978.²² Used by staff for deliveries, this road became the primary entrance to the property after the creation of the NHP in 1992. In the late 1970s, Lynch designed a line of hemlock behind the Norway spruce along the southern edge of the lawn to screen traffic along Elm Street from view. He also created a vista from the Mansion to the Ottauquechee River through the perimeter trees near the summer houses and continued the line of hemlock across the vista opening to screen the view onto the grounds from River Street. Lynch added a secondary hedge of informal plantings c. 1983 to provide additional screening in front of the Mansion.

Following the opening of Billings Farm & Museum, the Rockefellers explored a number of alternatives for preserving the Mansion grounds and Mount Tom forest and opening them to the public. In 1992, Congress established Marsh-Billings NHP, later renamed Marsh-Billings-Rockefeller NHP; and early in January 1993, Mary and Laurance delivered deeds to the Mansion grounds and forest to Secretary of the Interior Manuel Lujan. The property at 1 River Street, which had been subdivided in 1951, and the former gardener's cottage at 3 North Street were the only portions of the original Mansion grounds not transferred to public ownership. The Rockefellers retained a right of life estate in the property, and they pledged a gift of the Mansion contents upon the conclusion of their tenancy. Laurance also pledged an endowment fund to be held by the Woodstock Foundation for the purposes of preservation and conservation maintenance of the Mansion grounds and forest. He donated scenic easements to help preserve the park's viewshed. In addition, he pledged a fund for the community of Woodstock to offset the effect of the removal of park property from the tax rolls. Altogether, the value of the Rockefellers' gift to the people of the United States amounted to \$21.4 million. The Rockefellers continued to live seasonally at the Mansion through 1997. Mary French Rockefeller died on April 17, 1997, and Laurance Rockefeller proceeded with their plans to conclude the life estate at the end of that year, transferring the property to the National Park Service on January 1, 1998. The NHP opened to the public on June 5, 1998.

The National Park Service currently manages the Mount Tom Forest as a cultural landscape and living exhibit representing more than a century of forest stewardship in America, from the earliest scientific silvicultural practices to contemporary practices of sustainable forest management. The residential portion of the Billings estate conveys the history of stewardship over four generations. The adjacent working dairy farm and museum of rural Vermont life at Billings Farm & Museum (outside the District) illustrate the property's agricultural conservation legacy. As a whole, through the developments implemented on the property from 1869 to 1997 by the Billings and Rockefeller families according to the concepts first elaborated by Marsh, Marsh-Billings-Rockefeller NHP represents the history of American conservation and land stewardship as it evolved over the last century (NPS 2001).

CRITERION A – AGRICULTURE

The District is significant in the area of Agriculture for its associations with the model farm developed by Billings between 1869 and 1890, an early example of a Vermont gentleman's farm. Although the center of the Billings agricultural operation was located outside the District (on the property now operated as Billings Farm & Museum), the Mount Tom Forest within the District represents the progressive role of

²² Laurance Rockefeller established the RockResorts company in 1956 to develop resorts that blend into and promote National Parks; they are considered a pre-cursor to today's eco-tourism industry (Winks 1997:54).

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

forestry in farming operations from the late nineteenth century through the middle of the twentieth century.

Billings developed the former Marsh property during a period when several successful businessmen established large-scale model or "gentleman" farms in Vermont. Although the state's sheep and grain economy declined by the mid-nineteenth century, new niche agricultural markets such as dairy products and fruits developed. Vermont's state government favored the move from sheep to dairy farming, publishing a report in 1868 on the potential profits. The availability of refrigerated train cars by the 1880s allowed shipment of dairy products across the country, and early on Vermont promoted butter creameries and local cheese plants. By 1900, the state was the leading butter producer in the United States. The dairy industry brought with it the gradual rise of specialized, or intensive, farming, but many farmers also experimented with a variety of agricultural operations such as orchard farming, stock breeding, maple sugaring, poultry raising, mink and fox farming, and potato, hops, and tobacco growing. Though some of these operations, such as stock breeding and orchard farming, took place on specialized farms, most of these activities constituted only a part of a series of diversified operations as any one operation was generally unable to succeed on its own (Vermont Division for Historic Preservation 1991).

The size and complexity of gentleman farms like Billings' distinguished them from the more typical stock farms owned by many sheep, horse, or cattle breeders. In addition to their superior stock breeding operations, gentleman farmers were interested in experimental agriculture on all levels; their farms included a wide variety of operations such as horticulture, crop husbandry, dairying, orchard farming and maple processing. Distinctly progressive, these men promoted agricultural improvements and education through their own endeavors in modern farming. At the same time, they consciously emulated the wealthy landed gentry of England with their vast property holdings, model farm complexes, and superior herds (Vermont Division for Historic Preservation 1991).

When Billings began to develop his farm and forest in the 1870s, he had access to numerous sources of information on scientific farming practice, ranging from local and state-sponsored agricultural associations to educational institutions. Beginning in the 1840s, county agricultural societies held annual fairs in Vermont like the Windsor County Fair at which Billings spoke in 1864. In 1856, the Vermont State Agricultural Society incorporated and began its annual State Fair, typically held in the larger towns such as Rutland, Burlington, Montpelier, Brattleboro, and St. Albans. Interest in agricultural education throughout the country grew after the Civil War. US Representative Justin S. Morrill of Strafford, Vermont, wrote and sponsored the 1862 Federal Morrill Land Grant Act that made available funds from the sale of US lands to create the endowment for an agricultural college in each state.²³ Agricultural schools chartered under the act in 1863 included the University of Massachusetts Amherst, Pennsylvania State University, and Michigan State University. The Vermont legislature followed in 1864 with its creation of the Vermont Agricultural College, which became the State Agriculture College attached to the University of Vermont in 1865. The legislature also created the State Board of Agriculture in 1872 to promote improved agricultural practice in areas such as animal and crop husbandry, and farm building design. Numerous farming periodicals disseminated the information produced by the agricultural colleges and associations. Billings owned a sizable library of agricultural literature published by the late nineteenth-century agricultural press empire Orange Judd & Company, including Ten Acres Enough by Edmund Morris, a member of a back-to-the-land movement that promoted deep plowing and heavy manuring instead of chemical fertilizers to restore the soil. He also owned a copy of the Boston landscape

²³ The 1887 Hatch Act, which followed the Morrill Act, mandated agricultural experiment stations connected to each land grant school to promote agricultural research to benefit farmers (Association of Public and Land-Grant Universities 2012:17).

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

gardener Robert Morris Copeland's 1859 publication *Country Life: A Handbook of Agriculture, Horticulture, and Landscape Gardening*, which discussed sustainable forest management as a critical component of profitable agricultural practice (Albers 2000:214; Association of Public and Land-Grant Universities 2012:8; Vermont Division for Historic Preservation 1991).

The main Billings farm operations were located outside the District on the Ottauquechee River floodplain. Supplemental crops such as apples, grains, potatoes, livestock, and maple sugar were mostly concentrated at Hill Top Farm, also outside the District on the west side of Mount Tom, and at the McKenzie Farm at the western end of the District along Prosper Road. Within the Mount Tom Forest, Billings also maintained several existing agricultural fields for haying and grazing: the <u>Summer Pasture (LCS No. none, historic associated feature)</u>, <u>Spring Lot (LCS No. none, historic associated feature)</u>, <u>Elm Lot (LCS No. none, historic associated feature)</u>, and <u>French Lot (LCS No. none, historic associated feature)</u>. In the mid-1880s, he placed <u>Granite Property Markers (LCS No. none, historic associated features)</u> at the corners of some former lot divisions related to the earlier vernacular farms absorbed into the Billings estate.

Billings conducted numerous innovative experiments in animal breeding, manuring, and sustainable farm management. His development of the farm exemplified the type of agrarian conservation advocated by Marsh, in which the land's highest value lies in its use, improvement, and stewardship. By 1860, the Marsh farm produced 300 pounds of butter and 150 pounds of cheese. Billings brought the best livestock breeds to the countryside regardless of their general applicability. He became the first farmer in Vermont to import Jersey cattle directly, and his farm quickly developed one of the best herds in the state. Beginning in 1883, he started having Southdown sheep shipped directly to the farm from England and he also introduced Berkshire hogs. George Aitken, the new farm manager Billings hired in 1884, greatly expanded the farm's productivity in the subsequent decades (Madison 1999:7, 33, 36; NPS 2001).

Billings' forestry experiments functioned as an integral part of his scientific farm operations. Planting trees protected the land by lessening erosion and increasing water quality. Billings viewed tree planting and the establishment of forest groves as closely connected to other agricultural activities, because he believed a well-managed forest would increase the likelihood of economic success for Vermont's farmers. Forests could help farmers meet their own needs for firewood and lumber as well as provide an important source of additional income. As early as 1864, when he spoke to Vermonters at the Windsor County Fair on their state's potential to lead in "her most important pursuit..., that of agriculture," Billings remarked "the immense value of the forests is little understood, & the absolute necessity of using them and not preserving them is to be learned" (quoted in Nadecinek 2004:21).

Two decades later, Billings incorporated this sustainable yield perspective in the recommendations of the Vermont Forestry Commission's 1884 status report, of which he served as primary author. The report emphasized profitability and economic incentives for increasing tree planting, noting "although there is much cleared land that could be profitably turned over to wood culture there has been no systematic work in that direction" (quoted in Nadecinek 2004:59). Billings encouraged farmers to develop the timber industry as another niche agricultural market in which Vermont could prosper. "The farmer," he wrote, "must learn to consider timber as a crop; calculate as he does with other crops what varieties are adapted to different soils" (quoted in Nadecinek 2004:59). Wealthy individuals like himself who developed their forests according to well-researched scientific methods could provide the state's farmers with valuable examples, but "the experimental work of the practical farmer made with his own hand and constantly under his watchful eye, [was argued to be] the best school of forestry. It educates at the same time it gives practical results" (quoted in Nadecinek 2004:59). Through his own work in the Mount Tom Forest,

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

Billings clearly demonstrated his commitment to reinvigorating Vermont's agricultural economy through innovative conservation and reforestation practices.

CRITERION B - CONSERVATION

Under Criterion B in the area of Conservation, the District is nationally significant as the birthplace and family home of the pioneering environmentalist George Perkins Marsh (1801–1882); the model gentleman's farm of the industrialist and conservationist Frederick Billings (1823–1890); and the seasonal home of the philanthropist and conservationist Laurance Spelman Rockefeller (1910–2004).

George Perkins Marsh

George Perkins Marsh's seminal study in ecology and conservation titled *Man and Nature: Or Physical Geography As Modified by Human Action*, first published in 1864, is generally considered "the fountainhead of the conservation movement" in America (quoted in Lowenthal 1958:246). His biographer David Lowenthal places *Man and Nature* treatment of humankind's relationship to the natural world on a parallel with Charles Darwin's *On the Origin of Species*. Marsh belonged to a small but vocal minority who expressed increasing concern in the mid-nineteenth century about the potential adverse impacts of unrestrained development across the United States. His thoughtful and comprehensive writings on the environment, the first to reach a global audience, provided the foundation for modern ecology and created a broad public awareness of the subject. Marsh's philosophy became the cornerstone for American conservationism and an instrumental force in shaping national and state forestry policies (Albers 2000:196; Dorman 1997:3; Foster 2009:127–131; Lowenthal 1958:267–270).

Marsh's personal observations of the transformation of Vermont's agricultural landscape during his lifetime formed the basis for his fundamental views on the environment. Marsh was born in Woodstock, Vermont, on March 15, 1801, the second son of Charles Marsh (1765–1847) and his second wife, Susan Perkins. Charles Marsh had joined a rush of settlers in the Ottauquechee River valley after the Revolutionary War, arriving in Woodstock in 1788 from Hartford, Vermont, about seven miles to the east, after attending Dartmouth College in Hanover, New Hampshire, and Judge Tapping Reed's law school in Litchfield, Connecticut. He purchased James Cady's 50-acre farm in January 1789, where he built a small frame house the following year (located on the site of the current Tennis Court until its c. 1869 relocation outside the District boundary). Charles Marsh opened the first law practice in the village and oversaw the construction of the courthouse when Woodstock became the new Windsor County seat in 1790.24 He later held several high political offices including federal district attorney and Congressional representative. His financial success enabled him to expand his initial property and transform it into a prosperous farm and refined country seat, known locally as Marsh Place or Marsh Hill. Charles and his first wife, Nancy Collins, had two children, Charles Jr. (1790-1817) and Ann Collins (b. 1793), before Nancy's death in 1793. Five years later, he married Susan Perkins, the widow of lawyer and poet Josias Arnold, and had five more children: Lyndon Arnold (b. 1799), George Perkins (b. 1801), Joseph (b. 1807), Sarah Burrill (b. 1809), and Charles Jr. (b. 1821). Between 1805 and 1807, the family had a new brick Federal-style mansion built—the core of the present Mansion—slightly southwest of the earlier farmhouse in which George had been born (Lowenthal 1958).

²⁴ The Charles Marsh Law Office, also used by George Perkins Marsh and his brother Lyndon Arnold Marsh, is still extant at 72 Pleasant Street in Woodstock and is listed individually in the National Register (NRIS # 94001449).

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

During his childhood on the Woodstock farm, George Marsh developed a strong interest in and love of nature. He later recalled riding through the forested ridges of Mount Tom with his father, who "pointed out the most striking trees as we passed them, and told me how to distinguish their varieties. I do not think I ever afterward failed to know one forest-tree from another" (quoted in Lowenthal 1958:18). Following his graduation from Dartmouth College in August 1820, Marsh taught briefly, then returned to Woodstock and studied law for four years. He passed the bar in September 1825 and shortly after established a law practice in Burlington, Vermont. Although he no longer lived in Woodstock, his associations with the family farm there continued through 1869, when his youngest sibling, Charles, Jr., who had acquired the property in 1847, sold it to Frederick Billings (Lowenthal 1958).

George Marsh's early career included participation in public affairs, real estate speculation, sheep farming, and involvement in the lumber, railroad, and mining industries. He also pursued scholarly interests ranging from linguistics to social history. In 1843, Marsh was elected to represent Vermont in Congress, and during his time in Washington, D.C., he helped to found the Smithsonian Institution. From 1849 to 1854, he served as United States Minister to Turkey and traveled extensively. Returning to Burlington, Marsh served as state railroad commissioner, housing commissioner, and fish commissioner and published several well-regarded books on the English language during the 1850s. The latter portion of his professional life began with his appointment as the first United States Ambassador to Italy in 1861, a position he held for 21 years until his death in Vallombrosa, Italy, in 1882 (Lowenthal 1958).

Notwithstanding his substantial contributions to other disciplines, Marsh's most well-known achievement, and that most closely associated with the District, is in the area of conservation. His 1864 discourse *Man and Nature* was the first book in Europe or the United States to provide a comprehensive overview of the natural environment, including both historical and scientific evidence of the deterioration resulting from human activity, along with practical recommendations for future ecological development. Marsh bluntly and eloquently declared, "Wherever he [man] plants his foot, the harmonies of nature are turned to discords" (quoted in Lowenthal 1958:253). This idea that humans had an inherently negative impact on the earth was revolutionary to most Americans in the 1840s and 1850s, who viewed the country's abundant natural resources as inexhaustible assets intended to be harnessed in the name of progress (Dorman 1997:3, 21; Lowenthal 1958).

As early as September 1847, Marsh spoke to the Rutland County Agricultural Society about the ecological and social impacts of logging in Vermont. Over the course of his subsequent travels in Europe and the Near East, Marsh had the opportunity to make comparisons of diverse landscapes. He attributed the decline of Mediterranean empires to poor forestry conservation practices and concluded that Americans must become a "co-worker with nature" to avoid a physical decay like that of the once-rich Roman Empire (quoted in Dorman 1997:22). As Vermont's fish commissioner in the late 1850s, he observed the effects of deforestation on the state's streams and rivers and, consequently, on fish populations. When he began writing *Man and Nature* while living in Burlington, Marsh extrapolated his scientific insights on the connections between wasteful forestry practices and eroding watershed systems in Vermont to the entire globe. He completed the book in Italy during the winter of 1862–1863 (Dorman 1997:22; Foster 2009:128–129, 306).

Marsh published *Man and Nature* to "articulate the web, the connectedness of all life" and hoped a "diffusion of knowledge on this subject among the classes that . . . own their woods, their pastures, and their ploughlands" might prevent the further degradation of the landscape (quoted in Dorman 1997:21). Consistent with the general American nineteenth-century view of progress, Marsh combined his observations of the negative consequences of human activities with a pragmatic form of optimism and

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

enthusiasm for human ingenuity. He did not advocate the preservation of native ecosystems for their own sake or for the spiritual benefit of humankind. Instead, he encouraged responsible stewardship of natural resources and contended that active and managed protection of the forests would have economic benefits. Thus, while clear-cutting in watersheds resulted in drought, flood, erosion, and unfavorable climate change, less wasteful practices in farming, timber harvesting, and mining could reverse the destructive process and result in improvements to society and increased profits (Dorman 1997:21; Lowenthal 1958).

As a scholar, Marsh drew from a broad universe of sources in his attempt to synthesize diverse aspects of nature and their implications for humanity. He studied the most recent works of the "new geographers," including Alexander von Humboldt, Karl Ritter, and Arnold Henry Guyot, and presented his own fundamentally different conclusions in *Man and Nature*, which he described as "a little volume showing that whereas Ritter and Guyot think that the earth made man, man in fact made the earth" (quoted in Lowenthal 1958: 248). Contemporary European naturalists and foresters such as Jules Clavé, Alexandre Charles Surell, and Friedrich Pfeil, the latter considered one of the fathers of German forestry, also influenced Marsh's work (Dorman 1997:21; Lowenthal 1958:270–276).

The regional landscape of New England, so dramatically transformed by the industrial activity it had enabled, inspired other members of its cultural elite to advocate for its protection in addition to Marsh. New England's Transcendentalist writers and the artists of the Hudson River School—influenced heavily by the artistic, literary, and intellectual movement known as Romanticism-joined Marsh and other prominent Easterners such as journalist and editor William Cullen Bryant and writer Washington Irving in advancing the first systematic arguments for resource conservation and wilderness preservation in the United States. Romantics placed a great emphasis on the power of strong emotion to inform the aesthetic experience, in particular those emotions that arose in response to the sublime, beautiful, and picturesque qualities of the natural world. Hudson River School painters such as Thomas Cole, Albert Bierstadt, and Frederic Edwin Church, initially based in New York's Catskill Mountains but later working in New England's White Mountains among other regions, exalted the awesome power of nature in their landscapes. Cole spoke of the rugged and untamed American wilderness as "the most distinctive, and perhaps the most impressive, characteristic of American scenery" (quoted in Dorman 1997:16). Similarly, Romantic literature incorporated rapturous descriptions of the frontier and a nationalistic pride in the unique aspects of the American landscape. Henry David Thoreau's book The Maine Woods, first published the same year as Marsh's, described the author's earlier excursions through Maine's virgin forests and fervent wishes that they remain unspoiled (Dorman 1997:25; Foster 2009:30-31; Nadenicek 2004:14-15).

Certain themes predominated in the various writings of the period: concern for the possibility of a timber famine, the wastefulness of current development practices, the growing scarcity of land and water, and the imperative of private and public management for future growth and prosperity. Thoreau represented one of the more radical extremes, believing that the survival of civilization required the preservation of untouched wilderness even as he acknowledged the necessity of human intervention. He suggested in *The Maine Woods* the creation of wilderness parks following the European precedent of royal game parks, an idea similar to those that appeared in Frederick Law Olmsted Sr.'s 1865 report on the Yosemite Valley, *The Yosemite and the Mariposa Grove: A Preliminary Report.* Marsh advanced a more utilitarian view of nature, in which the inevitable human exploitation of natural resources could be tempered by a rational and moral restraint. He saw no ethical virtue in the wilderness alone; on the contrary, he felt that man's continued existence relied upon his ability to tame nature. At the same time, however, Marsh believed that the survival of civilization necessitated a compromise between the primitivist ideas of Thoreau and the conflicting requirements of progress. He advocated for conscious and rational, rather than thoughtless

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

and destructive, intervention in nature. The utilitarian conservation ethic espoused by Marsh in *Man and Nature* presented a more viable alternative that attracted many late nineteenth-century conservationists (Dorman 1997:19–20, 45; Foster 2009:30–31; Lowenthal 1958:272–273).

Some historians contend that Marsh's ideas helped to influence public opinion in favor of the reservation of large areas of land for public parks. Marsh did promote state land reserves, such as the Adirondacks, and in the second edition of his book, published in 1874, included a discussion of the merits of publicly protected lands. He pointed to the progress that other European countries had made in forestry and recommended adapting such methods and legislation to American culture, where he noted that "public property is not sufficiently respected," and expressed his wish that state governments had retained more control over public lands (quoted in Dorman 1997:24). Although no documented connections exist between Marsh and the 1872 creation of Yellowstone National Park, his work belonged to the general confluence of nineteenth-century artistic, literary, and political efforts to call attention to America's scenic beauty that laid the foundation for the creation of the first national parks and helped establish conservation as a national value (Dorman 1997:24).

Marsh's widely read and influential 1864 book became an American classic that inspired the first generation of conservationists and remained the only work of its kind for well over 25 years. Scientists and the general public reviewed it favorably. More than 1,000 copies were sold within a few months, and it went through several editions. Many readers testified to its fundamental importance and contacted the author for advice. "So many forces, intellectual, social and economic" resulted in "the reappraisal of the forest," but Marsh's writings were "the most eloquent as well as the most scholarly expression of the new philosophy of the relation between man and nature" (quoted in Foulds, Lacy, and Meier 1994:9). Marsh's exhortation, "The multiplying population and the impoverished resources of the globe demand new triumphs of mind over matter," ultimately led Americans to develop new approaches to resource management that prioritized conservation (quoted in Lowenthal 1958:274, 267–270).

Frederick Billings

During the same period in which George Perkins Marsh's work began to influence the development of an American conservation movement, the wealthy lawyer Frederick Billings combined Marsh's environmental cautionary tales with the late nineteenth century's efficiency ethic to create a model for sustainable and profitable conservation. Through his pioneering conservation work on the former Marsh family farm in Woodstock, Vermont, between 1869 and 1890 (described in detail under Criterion A), Billings demonstrated informed husbandry and stewardship practices that were imitated widely by other gentleman farmers and wealthy landowners. He translated Marsh's ideas into practice largely through reforestation; his forestry experiments played an instrumental part in the advancement of conservation throughout Vermont and served as a model for reforestation efforts across the country. Frederick Billings went on to gain national recognition for his successful financial leadership of the Northern Pacific Railroad in the late 1870s and 1880s. His Woodstock estate is the property most closely associated with his contributions as an early and progressive practitioner in the area of conservation and a pioneer in reforestation and scientific farm management.

Frederick Billings was born September 27, 1823, in Royalton, Vermont, about 15 miles north of Woodstock on the White River. His father, a farmer and merchant, represented Royalton in the state legislature in 1825. In 1835, the family of nine moved to Woodstock, at that time Windsor County's shire town and the fifth largest village in the state, with a population of about 3,250. Billings entered the University of Vermont in 1840, where he encountered both Marsh and the naturalist Zadock Thompson,

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

future author of the *Natural History of Vermont*. He also cultivated an understanding of English Romanticism through the works of such landscape theorists as William Gilpin, Uvedale Price, Richard Payne Knight, and Edmund Burke. Billings went on to study law in Montpelier and in 1846 was appointed state secretary of civil and military affairs under Governor Horace Eaton. In 1849, he headed west to California, where he remained through the booming Gold Rush of the 1850s. As the first American to practice law in San Francisco, the center of speculative activity during those years, Billings specialized in real estate law and rapidly found financial success settling land claims and investing privately in real estate. At the same time, he rose to prominence among the city's social and political leaders and cultivated valuable connections (Nadenicek 2004:15–16).

Conservation issues also drew Billings' interest in California. He witnessed the destructive effects of the lucrative mining and timber industries on the area's natural beauty, which included sites never before seen by Easterners such as the Yosemite Valley. Like other prominent advocates of conservation in the West, Billings saw the commercial potential in such natural wonders and wrote home of the need to preserve places like Yosemite by encouraging tourism instead of destruction. In 1850, he helped to establish San Francisco's Presidio as a government preserve. Through his work managing the legal and financial aspects of John and Jessie Frémont's Las Mariposas estate, he met the photographer Carleton E. Watkins, whose 1863 Yosemite album encouraged Congress to pass the legislation granting the land that is now Yosemite National Park to the State of California for conservation and recreation purposes, resulting in the creation of the first state park in the country the following year. Billings acquired copies of Watkins' photos and sent them to Harvard professor Louis Agassiz, an influential supporter of the park. He also wrote to Senator John Conness, the sponsor of the Yosemite bill, in support of the project. Las Mariposas also brought Billings in contact with Frederick Law Olmsted, Sr., the author of a ground-breaking study on the Yosemite Valley's potential and chair of the Yosemite park commission. In his later role with the Northern Pacific Railroad, Billings hired Olmsted to prepare a master plan for the city of Tacoma, Washington (Winks 1991:278-280).

During the Civil War, Billings left California for New York City, where he met Julia Parmly, the daughter of a wealthy and prominent family. He married Julia on March 31, 1862, and two weeks later sailed for California with her. The couple lived in San Francisco for a year and a half, and their first son, Parmly, was born there in February 1863. Billings eventually negotiated the sale of the financially troubled Las Mariposas, and the couple returned to the East Coast in the autumn of 1863. They spent the winter in New York City then moved to the Billings family home in Woodstock, known as The Maples, in 1864. The family lived primarily at The Maples for the next five years, with intermittent periods in New York, until Billings purchased the Marsh property in 1869. Throughout most of the 1860s and 1870s, Billings commuted more than 250 miles from Woodstock to New York City, returning to California for one long business trip between 1865 and 1866. Frederick and Julia's six other children were all born in Woodstock: Laura, 1864; Frederick Jr. "Fritz," 1866; Mary Montagu, 1869; Elizabeth, 1871; Ehrick, 1872; and Richard, 1875 (Porter/Miller Ink 2013:Part 1a, 88, 117–119).

In Vermont, Billings discovered that, as in the West, extensive logging to support mining, timber harvesting, and specialized agriculture had marred large portions of the landscape. The eroded slopes, silted rivers, non-productive fields, and barren hills no longer supported economic growth. Consequently, the region's farmers abandoned the over-used land and looked for job opportunities in the cities or out West. Billings saw the possibility that remained in the land, however, and approached the future with the same pragmatic optimism as Marsh did. His 1864 speech at the Windsor County Fair included the declaration that "Vermont is by no means finished" (quoted in Auwaerter and Curry 2005: Volume I, 48). The Marsh place—featuring the best farmland in the village, panoramic views from the summit of Mount

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

Tom, and an innate connection to Marsh—offered Billings the perfect opportunity to implement Marsh's philosophy as an example to the region's farmers.

In 1869, the same year that he purchased the Marsh place as his family home, Billings also bought his first stock in the Northern Pacific Railroad, the "single greatest American corporate undertaking of the nineteenth century" and the venture that ultimately defined his later career (quoted in Winks 1991:187). He first became involved with railroads through his business relationship with John Frémont, who persuaded Billings to invest in the Atlantic & Pacific line in the late 1860s. Billings resigned from the Atlantic & Pacific board in June 1867 but subsequently served briefly as director of the Southern Pacific and invested in several other smaller lines. He became a local benefactor of the Woodstock Railroad, a project his brother Franklin helped lead. His experience with land law and real estate development served him well in the railroad business, which at the time essentially consisted of huge land management companies. The Northern Pacific broke ground in Minnesota in February 1870, and the following month Billings was elected to a seat on its board of directors. Recognizing the important role that the company's Land Department would play in the success of the enterprise, the director Jay Cooke chose Billings to serve as the chair of the Land Committee, the supervisory arm of the Land Department, established in February 1871 (Winks 1991:182–185).

The Northern Pacific struggled to remain solvent over the next two years, but when the financial panic of September 1873 occurred (in large part as a result of Cooke's overextending his company's credit), only 500 miles of track were in operation; the Land Department had sold only 41,000 acres of Minnesota land; and the West Coast operations were also suffering. Billings renewed the Land Department's public relations efforts, including convincing directors to exchange their bonds for large amounts of land on which they established large-scale agricultural demonstration farms (known as bonanza farms) that displayed the soil's viability for grain production. After the company went into receivership in 1875, Billings oversaw its reorganization, termed "a brilliant stroke of financial genius" in the *Portland Oregonian* (quoted in Winks 1991:213). By 1878, the Northern Pacific made nearly \$8 million in land sales to 3,000 purchasers, raising the capital needed to finish the line and ensure its survival. When the company's president resigned in May 1879, Billings' appointment as his successor went unopposed (Nadenicek 2004:27–28, 33–34; Winks 1991:208–219).

In his various leadership roles at the Northern Pacific, Billings contributed substantially to the railroad's conservation efforts, extending Marsh's principles of land management to the commercial arena. As the major force in shaping the landscape of the country, railroad companies also played a role in furthering the conservation movement, both indirectly through their promotions of the study of forestry and directly through their planting experiments. Some of the railroad land grants traversed important timber regions; for example, the Northern Pacific grant crossed the timber belt of western Montana, northern Idaho, and northeastern Washington, as well as the Pacific coast fir belt in western Washington. In the early 1870s, many railroad companies enthusiastically promoted forest planting and conducted tree-planting programs to compensate for the extensive deforestation that resulted from the westward expansion of the rail lines, among other reasons. The Kansas Pacific Railway established three forestry stations along the rail line west of Kansas City that included Norway spruce and European larch trees. Other railroads that planted experimental trees along the lines included the St. Paul & Pacific Railroad (1870), Burlington & Missouri River Railroad Company of Nebraska (1872), St. Paul & Sioux City Railroad, and Santa Fe Railroad (1873). The financial panic of 1873 halted most railroad tree-planting efforts, however, and overall the experiments were spotty, with more discussed than actually implemented (only 15,000 acres in total) (Dorman 1997:42-43; Nadenicek 2004:26, 28-30).

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT.
County and State

Billings worked closely with the Northern Pacific Land Department's first land commissioner, John S. Loomis, who had experience with the Kansas Pacific's forestry stations, to spearhead attempts to plant a large number of willows, cottonwoods, and box elders across the Great Plains. Billings studied contemporary forestry literature and promoted the Federal Timber Culture Acts of 1873 and 1878. As president of the railroad, he employed F. Jay Haynes to photograph landscape scenes at Yellowstone for railroad brochures and initiated another wave of forest planting. Billings had a keen interest in using the orderly settlement of the towns that developed along the Northern Pacific line to demonstrate his belief that "an alliance between the engine of commerce and the aesthetic of conservation could be achieved to the benefit of the majority of Americans" (Winks 1991:283). In Billings, Montana, which was named for him at its founding in 1882, he hired a manager to oversee his farm and ranch land, with a focus on landscape-based projects with a social purpose (Madison 1999:36; Nadenicek 2004:12, 29, 36).

Billings' land management and forestry experience in the West influenced the development of his home landscape in Vermont during the same period. Woodstock became the clearest example of his social ideal as well as his retreat from business affairs. Billings implemented his most substantial conservation efforts there, integrating landscape gardening, forestry, and farming. He developed much of the estate by 1875 and again turned his attention to improvements on the property after 1881, when a hostile takeover ousted him from his position at the Northern Pacific Railroad. Frederick and Julia had often considered maintaining a home in New York City in addition to the one in Vermont, and in early 1881, Billings purchased the Arnold House on Madison Avenue. After 1881, the family generally resided at the Mansion seasonally, living at their house in New York City during the winter. After the deaths of two of his sons in quick succession (Parmly in 1888 and Ehrick in 1889), Billings suffered a stroke in December 1889. He moved to Woodstock the following May for the season and died in his sleep there on September 30, 1890 (Nadenicek 2004:12).

In addition to his private reforestation efforts, Billings sought to encourage similar efforts throughout the state. In 1882, he was appointed to Vermont's first forestry commission. The commission distributed a survey to collect information from across the state at a grassroots level for its status report on the condition of Vermont forests, of which Billings was lead author. Billings paid to have more copies of the report printed so that more farmers could have access to the information contained in it. The report discussed environmental concerns, profitability and incentives for farmers to grow trees and consider timber as a crop, and the need for institutions and wealthy individuals to set an example. It recommended aggressive reforestation programs similar to that in place on the Billings estate. It also advocated the observance of Arbor Day, which was not officially celebrated in Vermont until 1886, the same year that Hiram Cutting produced a local survey on *The Forests of Vermont*. Billings also honored the memory of George Perkins Marsh in 1882, when he purchased Marsh's extensive library from his widow and funded the construction of a suitable building to house the library at the University of Vermont. He viewed the permanent installation of the collection, noted for its holdings in science and philology, at the state's agricultural college as a significant contribution to agricultural education that would preserve Marsh's conservation legacy for future generations (Nadenicek 2004:58–60; Winks 1991:303–305).

Billings extended his conservation philosophy, characterized by responsibility for one's neighbors and the broader public good, to his philanthropy throughout the Woodstock community and to other institutions and communities in the state. His farm operations employed a sizable local labor force and gave significant business to area merchants. Billings also opened the forests and greenhouses on the property to the public as educational and recreational resources, reflecting his belief in the benefit he was providing the community. Through his development of an extensive carriage road system and tree plantations, Billings laid an exemplary infrastructure for the type of stewardship practiced by other wealthy

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

landowners in the state during the last quarter of the nineteenth century, such as William Seward Webb and Willard S. Martin (Madison 1999:4; NPS 2001; Vermont Division for Historic Preservation 1991:F-16).

Laurance Spelman Rockefeller

One of the foremost conservationists and philanthropists of the twentieth century, Laurance Spelman Rockefeller combined the ecological philosophy of George Perkins Marsh with the practical conservationist approach of Frederick Billings. He perpetuated both men's legacies through his stewardship of the Woodstock estate where Marsh was born and Billings implemented his pioneering reforestation program. As philanthropists, Laurance and his wife, Mary French Rockefeller, supported a number of causes, including social issues through the Young Women's Christian Association (YWCA) and medical research, but conservation was Laurance's primary interest. He developed models of sustainability that combined wilderness protection, public access, and economic development, building on the earlier conservation philosophy of Marsh. Rockefeller referred to his concept of stewardship as "Conservation for People," encouraging responsible-use conservation as a way of preserving wild ecosystems. The establishment of Marsh-Billings NHP in 1992 (later renamed Marsh-Billings-Rockefeller NHP) was a remarkable achievement in his enduring conservation career. At the local level, Laurance and Mary, who served as a trustee of the Woodstock Historical Society, made significant contributions toward conserving Woodstock's historic character and natural resources, while ensuring that the community remained economically viable by investing heavily in the local tourism industry. The park's enabling legislation recognizes Mary French Rockefeller's contribution to the conservation of the Woodstock estate, but the District's Criterion B significance in the area of Conservation is largely through Laurance Rockefeller due to the national-level significance of his contributions to the American conservation movement (Winks 1997).

Laurance Rockefeller looked to his own father's example in the field of conservation for inspiration. Laurance was born in Manhattan on May 26, 1910, the fourth of John D., Jr. and Abby Aldrich Rockefeller's six children. The philanthropic Rockefellers, one of the most influential and prosperous families in the United States, exposed their children to a wide range of cultures and landscapes and encouraged them to live productive, well-intended lives. The year of Laurance's birth, his father began a life-altering transition from working primarily in business to dedicating a large part of his life to charity, especially conservation causes. When Laurance was 6 years old, his father donated 5,000 acres of land near the family's summer home in Seal Harbor, Maine, toward the creation of Acadia National Park. At the age of 14, Laurance, two of his brothers, and his parents toured parks in the western United States, including Yosemite and Yellowstone. Upon experiencing Yellowstone's visible decline in maintenance due to a lack in federal funding, John D., Jr. immediately funded a park roads improvement project. When Laurance was 16 years old, his father embarked on a 30-year effort under the auspices of his Snake River Land Company (later renamed the Jackson Hole Preserve) to create Grand Teton National Park, just south of Yellowstone—a project for which Laurance later assumed responsibility (Miller 2011; Rocap 1989).

Laurance Rockefeller met Mary French at the age of 17 through her brother John, who roomed with Laurance's brother Nelson at Dartmouth College. Laurance and Mary started dating when they both lived in Cambridge, Massachusetts, where Laurance attended Harvard Law School and Mary studied sculpture after attending Vassar College from 1927–1929. Laurance left law school after two years, and the couple married on August 15, 1934, in Woodstock, Vermont. While Mary had a more personal interest in nature, Laurance made conservation the focus of his philanthropy. Mary, following in her mother's footsteps,

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

was active in the national leadership of the YWCA, advocating for social justice in the United States and beyond (Winks 1997:37–38).

In the decades following World War II, Laurance Rockefeller helped to influence the surge of public interest concerning the environment. He considered conservation as "central to the welfare of the people," and nothing was more important to him than the "creation of a conservation ethic in America" (quoted in Winks 1997:2). He strongly advocated the fostering of partnerships between the public and private sectors to advance social causes. Laurance's formal public involvement in conservation began in 1939 with his appointment to the Palisades Interstate Park Commission in New York, of which he was president from 1970 to 1977. Rockefeller served as conservation and outdoor recreation advisor to Presidents Eisenhower, Kennedy, Johnson, Nixon, and Ford and on numerous federal commissions to develop national conservation and environmental policies. In 1958, President Eisenhower appointed him chairman of the Outdoor Recreation Resources Review Commission, which later led to the creation of the Bureau of Outdoor Recreation. Laurance served as special emissary under President Johnson in the effort to create Redwood National Park in California, and he headed the Citizens' Advisory Committee on Environmental Quality under Nixon and Ford. During the 1960s, Rockefeller was heavily involved in the Land and Water Conservation Fund, the Wilderness Act, and the National System of Scenic Rivers. He served as chairman of the White House Conference on Natural Beauty and the Citizens' Advisory Committee on Recreation and Natural Beauty with Lady Bird Johnson (Rockefeller Family & Associates 2004; Winks 1997).

Rockefeller also played a pivotal role in the establishment of several national parks, including Grand Teton in Wyoming and Virgin Islands. In 1956, Rockefeller donated 10,000 acres for the creation of Virgin Islands National Park, with the condition that the donated land remain undeveloped. In 1940, his first act as manager of the Jackson Hole Preserve, the non-profit conservation and education corporation established by his father, involved the restoration of the cultural landscape at Menor's Ferry, an early transportation site across the Snake River. Laurance also developed high-quality resort developments in the 1950s located in close proximity to national parks and scenic areas in the Caribbean and throughout the United States, including Hawaii and the Rockies (the site of Jackson Lake Lodge). Profits made from these resorts went toward conservation purposes in nearby parks. One of his last conservation efforts included the 2001 donation of the Rockefeller family's 1,106-acre vacation home, the JY Ranch, to Grand Teton National Park, with the stipulation that all cabins and structures be removed and the natural landscape reclaimed (Miller 2011; Winks 1997).

In his home state of New York, Laurance Rockefeller served as chairman of the State Council of Parks during the 1950s and 1960s and worked with his brother, Governor Nelson Rockefeller, to expand the state's park system. He was instrumental in the conservation of the Hudson River Valley, funded innercity park development, and helped lead an unsuccessful effort to designate the Adirondacks a national park. Laurance also led the efforts of many private conservation organizations. He helped to establish The Conservation Fund in 1948, established the American Conservation Association, Inc. in 1958, and organized the National Park and Recreation Association in 1965, for which he served as president. In 1957, the American Scenic and Historic Preservation Society awarded him its first Horace Marsden Albright Scenic Preservation Medal. In 1991, he became the first conservationist to be awarded the Congressional Gold Medal. In making the award, President George H. W. Bush called him a "champion of natural and human values" (quoted in Winks 1997:1; Rockefeller Family & Associates 2004).

Outside their private estate, the Rockefellers began to help shape Woodstock's environment and economy in the 1960s. In 1960 and 1961, Laurance acquired and improved the Mount Tom and Suicide Six ski

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

areas (a short distance north of the Mansion) and the Woodstock Country Club on the south side of the village. Together, these three properties formed the recreational core of what became the Woodstock Inn & Resort in the late 1960s. The resort served as an economic anchor to sustain and lead the area's growing tourism and four-season recreation industry. In 1968, the Rockefellers acquired the Woodstock Inn, an 1892 resort hotel on the village green. By the mid-1960s, the building was in disrepair and financial trouble, and in 1967 speculation spread about the possibility of a supermarket or some other new development replacing the inn in its prominent location. After hosting the last gala ball in the building, Laurance and Mary demolished the inn and replaced it in 1968 with a new, large but understated, Colonial Revival-style inn set back on its site on the green. That same year, the Rockefellers established the Woodstock Foundation to further their conservation-stewardship objectives.

The Woodstock Foundation and the Woodstock Inn & Resort funded and directed various physical improvements, planning studies, and institutions in the region over the subsequent years. These included the acquisition of historic properties and open spaces for preservation and conservation; the burying of overhead utility lines through the village and leading up to the Mansion; and the publication of a history of Woodstock's second century as a companion volume to the history by Henry Swan Dana commissioned by Frederick Billings. From the 1970s onward, the Woodstock Foundation also focused much of its efforts on preserving the Billings estate and establishing its place in Vermont's cultural scene and Woodstock's tourism industry. Laurance Rockefeller elaborated on this vision at the Foundation's 1977 annual meeting:

My long-range goal is to eventually include the Mansion, the Farm and related facilities, and the forests as an integrated unit to the approximate scope and extent that it existed during the time of Frederick Billings. Other properties that I have bought will supplement the family properties, and help protect the larger Woodstock area from deterioration through unwise development.

Primary objectives of the Foundation will be the preservation of open space; the preservation of the family farm and related historical values (under the family name); expansion of the outdoor recreational opportunities inherent in the Woodstock area because of its great natural beauty; the encouragement and practice of the best practices of forest management; the study of ecological methods of harnessing natural resources to achieve energy without pollution or depletion of our non-renewable resources; and the creation of broad educational values related to the above areas of interest, many of which will hopefully benefit the farmers of Vermont in the future I anticipate that our hopes and plans will evolve over a period of many years. I am hopeful that with the help of the family, we will add to the balance of Woodstock, and have a beneficial effect on the long-term economic vitality and stability of the community (quoted in Auwaerter and Curry 2005:Volume I, 176).

The Woodstock Foundation opened Billings Farm & Museum in 1983 as a working dairy farm and museum of agricultural life. According to Rockefeller, the venture would help preserve Vermont's agricultural heritage and the historic rural setting of Woodstock:

We have tried for many years to find meaningful ways in which this heritage [Marsh-Billings-Rockefeller Estate] could be shared with others while helping to preserve the historic value and delightful charm of the town and the unspoiled rural beauty of the surrounding area The proposed museum offers a wonderful means of restating and

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

reaffirming the culture and values so characteristic of Vermont—hard work, thrift, honesty, and self-sufficiency combined with hope and faith in the future, nourished by an innate belief and trust in God (quoted in Auwaerter and Curry 2005:Volume I, 177).

A decade later, Laurance and Mary Rockefeller decided to donate the Mansion grounds and the Mount Tom forest to the people of the United States for creation of a national park, expressing their belief that the best, most sustainable solution for continued stewardship of the historic Woodstock estate lay in the collaboration of one public entity, the National Park Service, and one private, the Woodstock Foundation, Inc. This decision reflected the Rockefellers' philosophy of the value of combined public and private participation in the creation of parks and places for outdoor recreation. It also correlated with their vision for the future of Woodstock's tourist economy anchored by the combination of the park, the Woodstock Foundation, and the Woodstock Inn & Resort.

As the legislation establishing Marsh-Billings NHP made its way toward enactment in 1992, the couple expressed their concept in testimony before both houses of Congress. They envisioned a park that would reflect their sense of purpose for the conservation, stewardship, and interpretation of the Woodstock estate, with the Mansion grounds and forest operated in partnership with their other Woodstock interests, particularly the Woodstock Foundation and Billings Farm & Museum. Working side by side, the park and Billings Farm & Museum would present the conservation stewardship heritage of George Perkins Marsh and Frederick Billings through the generations down to Mary and Laurance Rockefeller. These institutional colleagues would preserve the estate for the enjoyment and educational benefit of a broad range of visitors. In Laurance's words, "The true importance of Marsh, Billings, and those who follow in their footsteps, goes beyond simple stewardship. ... It involves new thought and new action to enhance and enrich...the past." Congress acknowledged Laurance's own significant stewardship contributions when it renamed the park Marsh-Billings-Rockefeller NHP in 1999.

CRITERION A - SOCIAL HISTORY

The fallout shelters in the Mansion and Belvedere are significant under Criterion A in the area of Social History for their association with civil defense during the Cold War era. Private fallout shelters reflected a period of national anxiety over the possibility of nuclear war and its consequences. The Rockefeller family, in particular Laurance's brother Nelson, joined other, primarily wealthy, Americans who responded to this anxiety by creating potential safe havens for themselves and their families throughout the country (NPS 2006b:6).

The Cold War era corresponds to the period of sustained political hostility between the Soviet Union and US-led Western countries between c. 1945 (the end of World War II) and c. 1990 (the collapse of the Soviet Union). Although the two sides never engaged directly in large-scale fighting, each developed substantial nuclear arsenals that included hydrogen bombs or H-bombs. Able to wreak destruction on an unimaginable scale, H-bombs were larger and more powerful than the atomic bombs dropped on the Japanese cities of Hiroshima and Nagasaki in 1945. Fears about civilian safety accompanied the build-up of nuclear weapons and led politicians and others to propose various methods of civil defense, such as dispersal and evacuation or relocation. The concept of deterrence initially served as the primary form of civil defense: in other words, the threat of "mutual assured destruction" (MAD) meant that neither side had incentive to launch a nuclear weapon at the other for fear of inevitable retaliation. However, the Soviet launch of Sputnik in 1957 and the development of intercontinental ballistic missiles (ICBMs),

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

followed by the Berlin Crisis of June 1961 and the Cuban Missile Crisis of 1962, precipitated more civil defense activity (Garrison 2006:40).²⁵

To make the policy of deterrence acceptable to the American public, federal leaders proposed public and private fallout shelters as part of a civil defense system that would "allow a meaningful number of citizens and the basic social structure to survive a nuclear strike without intolerable damage" (Garrison 2006:5). During the early years of the Cold War, shelter construction activity peaked immediately after the Soviet Union detonated its first atomic bomb, named Joe 1, in 1949 and immediately following the successful deployment of hydrogen bombs in the mid-1950s. In 1958, President Eisenhower issued a National Shelter Policy that presumed every citizen was responsible for their own protection, with particular emphasis on private shelter construction as opposed to federally funded public fallout shelters. At the same time, Eisenhower approved construction of a large confidential shelter outside Washington, DC, to protect members of Congress and allow them to continue to conduct business in the event of a nuclear blast (Garrison 2006:5, 32, 40; Winkler 1999:120).

Many companies marketed private shelters ranging from metal pipes lowered into a yard to essentially permanent basement lean-tos and concrete boxes to more elaborate shelters for the wealthy or famous. These shelters all promised comfortable accommodations while families waited for the "all-clear" signal following a nuclear bomb. However, home shelters were an expensive proposition, with even the simplest costing approximately \$2,500, almost half the median American income of \$5,315 in 1961.²⁷ Moreover, many Americans did not believe that shelters would protect them from the aftermath of a nuclear war. Despite the rhetoric put forth by the media and government, few private fallout shelters were constructed. A 1961 survey reported that only about 0.4% of respondents had constructed fallout shelters, resulting in an estimated 1,500 shelters.²⁸

²⁵ The Berlin Crisis resulted from a meeting between United States president John F. Kennedy and Soviet leader Nikita Khrushchev in June 1961, in which Khrushchev threatened to block American entry into West Berlin (part of Soviet-controlled East Germany) while Kennedy maintained that the "defense of West Berlin was central to the defense of American survival as a nation" (quoted in Garrison 2006:111). Kennedy then called for an increased draft, more military build-up, and a call-up of the military reserves. Khrushchev answered by erecting the Berlin Wall in August and breaking a 1958 bomb-test moratorium with the detonation of a 58-megaton H-bomb. The 13-day Cuban Missile Crisis occurred in October 1962 when the Soviets placed missiles aimed at the United States on the island of Cuba in partial response to American nuclear weapons in Turkey and Italy aimed at the Soviet Union (Garrison 2006:112).

Built between 1959 and 1962 at the Greenbrier Resort in the town of White Sulphur Springs, West Virginia, the classified shelter could house 1,100 people in 18 dormitories, each furnished with 30 sets of bunk beds. It was also equipped with medical and dental facilities; a pharmacy; a cafeteria; audio-visual equipment for television and radio broadcasts; separate chambers for the House and Senate, as well as a joint meeting room; three 14,000-gallon diesel tanks; and three 25,000-gallon water storage tanks. The Greenbrier shelter remained operational for 30 years, during which a cover company called Forsythe Associates maintained it. The federal government finally decommissioned it after an article published in the May 31, 1992, edition of the *Washington Post* revealed its existence to the American public. The shelter is now open to the public for tours (The Greenbrier 2013; PBS.org 1999).

²⁷ A pre-fabricated/minimal-assembly fallout shelter cost \$2,500. Government estimates for home-built shelters were as low as \$125, but as anxiety about nuclear war increased, so did market prices for materials and supplies (Goshko 1961a).

²⁸ In a survey done in the fall of 1961, 1474 families were selected at random and only 0.4% of the respondents, or a mere six families, answered that they had built a fallout shelter. To get a meaningful sample, 74 other fallout shelter owners were identified across the country; the 80 shelter owners were then contrasted with 80 non-shelter owners of similar demographics based on education level and estimated income (Berrien 1963:88).

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

The vast majority of home fallout shelters were constructed between 1961 and 1962 in response to the Berlin and Cuban Missile crises. In a televised speech on July 25, 1961, President Kennedy told the public that they should build and stock fallout shelters and asked Congress to allocate civil defense funds for the identification and provisioning of public fallout shelters in addition to expanding the defense budget. In response to criticisms that private shelters ignored the poor and those who did not own their own homes, Kennedy authorized a survey of public buildings to identify those places that could serve as a shelter. The survey identified buildings providing shelter for 46 million people; about one-fifth were stocked with rations, potable water, medical kits, dosimeters, and other supplies. Public fallout shelters, marked by yellow and black metal signs affixed to buildings, generally were located in the basements of buildings in major cities, although some smaller cities and towns constructed shelters for the protection of their residents (Garrison 2006:106–107, 112, 123; Lichtman 2006:44–45; Rose 2001:190).

After President Kennedy's call for Americans to take fallout protection into their own hands, citizens clamored for information on how to construct and stock fallout shelters. According to the Smithsonian, nearly 200,000 families obtained shelters between 1961 and 1962. The Wonder Building Corporation of Chicago, Illinois, reported an increase in annual sales from \$500,000 to \$20 million for the period between August and October of 1961 and a backlog of 2,000 orders awaiting fulfillment. Despite these figures, it is nearly impossible to know exactly how many home shelters were actually constructed. Many people were hesitant to admit to constructing a shelter for fear of having to turn away friends and neighbors, and it is believed that the majority of those that were constructed were not designated as such on building permits. Typically, people later bricked up the access hatchways or converted the shelters into wine cellars, storage areas, or playrooms, removing any evidence of their existence. Generally speaking, those who did construct shelters were wealthy and well educated and estimated that destruction would more likely occur in their immediate neighborhood than elsewhere in the country (Berrien et al. 1963:213–214; Gordon 1987:27; Jacobs 2010:63; Karp 1980; Morrison 1961; Rose 2001:10, 93, 187; Woestendiek 2001).

Nelson Rockefeller (1908-1979), Laurance's older brother who served as governor of New York from 1959-1973 and Vice President of the United States under Gerald Ford from 1974-1977, ardently supported the construction of fallout shelters. Nelson was well acquainted with the national political scene, working under Presidents Franklin D. Roosevelt and Harry Truman in advisory roles. He also served as special assistant to President Eisenhower for psychological warfare, working with the CIA and other organizations. He often conferred with experts in policy, intelligence, and military strategy, among other fields. In this capacity, he met with physicist Edward Teller and Secretary of State Henry Kissinger, both of whom heavily influenced his views on civil defense and fallout shelters. In a January 12, 1958, appearance on the television news program "Face the Nation," Nelson claimed that "shelters could enhance the will to resist on the part of the people," thus making the enemy less willing to attack (quoted in Rose 2001:30). In 1960, Governor Rockefeller proposed a shelter plan for New York that would require owners to put fallout shelters in every building and the state to construct shelters in schools, at a taxpayer cost of nearly a billion dollars. As part of his attempts to encourage New Yorkers to construct fallout shelters, Nelson drew parallels between preparations for nuclear war and "the problems our pioneer fathers faced in their log cabins where they never knew when an Indian attack might be launched" (quoted in Garrison 2006:119). While many presidents, Kennedy included, claimed to be in support of public fallout shelters, few were willing to appropriate funds for them. Kennedy likely prepared his 1961 civil defense plan in part to preempt the possibility of Nelson using the issue against him in a bid for the 1964 presidential election, which Nelson was believed to be considering (Garrison 2006:107-108; Washington Post 1961).

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

Nelson Rockefeller constructed fallout shelters in each of his four residences (located in Washington, DC; and Pocantico Hills, Albany, and Manhattan, New York) and directed the construction of one of the largest shelters in the country in downtown Albany. At a cost of 4 million dollars, it was large enough to hold 700 pre-selected state officials, business figures, and professionals. Rockefeller's private shelters varied in size, cost, and site location. The Washington shelter, located under the main entrance hall, could hold 20 people, had a reinforced concrete ceiling and two small water tanks, and cost \$300. The Pocantico Hills shelter, at a cost of \$250, could hold only eight people and was located in a small basement storeroom reinforced with sandbags on wooden joists over the entry. The Manhattan shelter, located in the basement, required little retrofitting as the building was constructed of reinforced concrete with a steel frame. The Albany shelter had triple-decker cots, and the others were equipped with double-decker cots (Garrison 2006:108; Kihss 1961).

Presumably on the recommendation of his older brother, Laurance Rockefeller had architect Theodor Muller design two fallout shelter systems for his Woodstock property, one associated with the Mansion and one with the Belvedere, all constructed between 1962 and 1965 (after the peak period for private fallout shelters). The main shelter for the Mansion is located in a reinforced section of the basement and connected to two tank shelters, each large enough for eight people, installed under the Mansion lawn. The shelters for the Belvedere consist of a long shelter beneath the Bowling Alley with room for 38 people and a connected underground tank shelter for eight people similar to those at the Mansion. The Rockefellers continued to have food and other supplies in the shelters replaced regularly throughout the 1970s and 1980s, even as the shelters became obsolete when tensions between the United States and the Soviet Union eased. After the collapse of the Soviet Union about 1990, Laurance considered filling in the tank shelters with concrete or dirt. However, consultation with the National Park Service led him to conclude that they should be preserved as part of the property's history (Porter/Miller Ink 2013: Part 1b, 29, 48).

CRITERION C – ARCHITECTURE

Several buildings and structures within the Marsh-Billings-Rockefeller NHP Historic District possess significance under Criterion C in the area of Architecture: the Mansion, the Belvedere complex, the underground fallout shelter systems associated with the Mansion and the Belvedere, the Upper and Lower Summer Houses, four of the estate outbuildings, and the Bungalow.

Mansion

The Mansion is a distinctive example of a late nineteenth-century Queen Anne-style design by New York City architect Henry Hudson Holly. Nathaniel Smith, a Woodstock carpenter/builder/architect, constructed the Mansion in 1805–1807 as a Federal-style brick house for Charles Marsh Sr., the father of George Perkins Marsh. Frederick Billings undertook a major remodeling of the house in 1869–1870 under the direction of Boston architect William Ralph Emerson, who enlarged and transformed it in the Stick and French Second Empire styles while preserving the structural core of the original Marsh house. In 1885, Billings began a second remodeling of similar magnitude. He engaged Holly to enlarge and redesign the house in the Queen Anne style. The Tiffany Glass Company of New York and Doe, Hunnewell & Co. of Boston provided interior design services. Few significant changes appear to have been made between 1890 and 1951. From 1955 to 1965, Laurance Spelman Rockefeller and his wife, Mary French Rockefeller, employed architect and interior designer Theodor Carl Muller of New York City to adapt the house for modern living while maintaining its historic character. Although the house

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

retains architectural materials and elements from all its major periods of construction and remodeling, the second Billings remodeling of 1885–1886 is most dominant.

No documentary evidence exists for the original appearance of the 1807 Marsh house. However, maps and images from the 1850s depict a two-and-one-half-story building with a five-bay by five-bay main block that featured a side-gable roof, two end chimneys, and center entrances in the south and east elevations, both surmounted by fanlights. Physical evidence indicates the presence of a one-story kitchen ell by at least 1833. Emerson's initial alterations to the house added dormers and a Mansard roof with iron cresting to the main block, creating three floors of living space, and a center gable with bargeboard embellishment to accentuate the facade. The renovations also included a two-story, full-width, gable-roof square bay on the north side; a substantial three-story brick addition to the southwest corner, with a Mansard roof and a square bay on the south elevation; a rebuilt rear service ell in brick with a Mansard-roof second story; and an open veranda that wrapped around three sides of the house, with an attached porte-cochère on the north side.

Emerson's stylistic updates to the Federal-period house coincided with a period in American design later termed "The Brown Decades," referring to the dominant use of dark colors and natural materials such as wood, brick, and brownstone. Architecture and interior design during this period looked back romantically to organic medieval and early Renaissance styles such as the Romanesque, Gothic, and Queen Anne, which exhibited exuberant naturalistic detail and materials, muted colors, and irregular massing. The reasons for the second Billings renovation, only 15 years after the first, are not known. The family had increased in size from three to seven children by 1885. Billings had also recently completed his successful career as president and board member of the Northwest Pacific Railroad, providing him with substantial financial stability and free time to devote to such a project. Finally, structural deficiencies existed in the 1869–1870 construction; settlement in the southwest addition and the new bay on the north side of the house caused serious cracks in the wall and ceiling plaster and uneven floors throughout.

In 1880, as part of his ongoing efforts to make improvements in the village of Woodstock, Billings commissioned Henry Hudson Holly to design a new chapel for the Congregational Church on Elm Street. Several years later, Holly also served as architect for the expansion of the church and remodeling of the parsonage. While Holly was in Woodstock taking measurements at the church in August 1882, Billings asked him to measure the Mansion. Over the next year, the two men discussed renovation plans at various points, but Billings did not decide to move ahead with them until July 1885. Holly's first visit to Woodstock to discuss the proposed changes to the house occurred August 4-5, and work began on August 31. During the course of the project, he made 15 visits to the site and consulted with Billings in New York City, where Holly maintained an office in the Trinity Building at 111 Broadway. A number of architectural drawings prepared by Holly and/or his office survive in the Billings Family Archives. These are primarily detail drawings of various building elements, including the structural framing of the attic and roof, exterior elevations, gables, doorways, windows, verandas, balconies, chimneys, cornices, and the main stair. Billings, an active and involved participant in the design and building process, carefully reviewed the drawings and sketches submitted by Holly and frequently made comments and changes as noted in his diary entries for 1885 and 1886. The project was essentially complete in 1886, with the exception of additional work on the veranda in May and June 1887.

To increase the usable space on the upper stories of the main house and in the rear service wing, Holly removed the wood-frame Mansard roofs, rebuilt the exterior third-story walls of the main house in brick and added a full attic story, and reconstructed the rear wing as a full two stories. He also added substantial complex massing to augment the main block and service wing as well as open the house to the landscape.

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

These additions included polygonal bay windows flanking the center entry, a second-story polygonal bay and third-story gable-roof balcony above the entry, a one-story polygonal bay window on the south elevation, and a gabled two-story square bay on the north elevation. Holly retained the Mansard roof and brickwork on the west elevation of the 1869–1870 addition and disturbed the surviving brickwork from the original Marsh house only where bays were added. All these elements had relatively restrained Queen Anne-style ornamentation, limited to geometric and floral patterns on the bargeboards along the eaves, turned woodwork and scroll-cut Aesthetic-style sunflower motifs on the porch railings and posts, geometric patterns in the bay window panels, and a Palladian window in the north gable. The windows featured modern, single-light, double-hung sashes without muntins to interfere with the views. Holly added a prominent set of curving steps to the veranda, increasing the emphasis on the front entrance. Other changes included the addition of new copper gutters and downspouts and slate-sheathed gable roofs and the reconstruction of the four chimneys. Billings commemorated the historic character of the house together with his improvements by installing two terra-cotta date plaques in the new brickwork gables: "1806" in the south elevation to mark the middle year of the original construction period and "1885" in the north elevation to mark the beginning of the remodeling project.

The floor plan and circulation patterns of the main house remained largely undisturbed save for the expansion of the library through the removal of the south hall. Most rooms were re-plastered and fitted with new woodwork, including new fireplaces. Holly collaborated with John Du Fais, representing the Tiffany Glass Company, and Joseph Hazelton, agent for Doe, Hunnewell & Co., on the design, fabrication, and installation of new Aesthetic-style interior architectural finishes. Holly designed new fireplaces, wood paneling, doors, and trim for all the family spaces except the library. He also designed several pieces of built-in cabinetry: a hall stand, bench, and two small bookcases in the main hall and a sideboard in the dining room. The main hall paneling and staircase are similar to a design depicted in his 1878 *Modern Dwellings*. The Tiffany Glass Company fabricated the colored stained-glass windows in the parlor, library, and music room. The parlor and library windows featured custom designs that incorporated themes suggested by Frederick and Julia Billings (musical and literary interests) and colors that coordinated with the décor. Billings also had a new steam heating system, electric battery-powered annunciator system, and additional gas lighting installed.

Subsequent alterations to the Mansion have not destroyed the overall exterior appearance of the building or the general layout of the interior. The Billings family had the veranda enlarged along the south side of the house in the spring of 1899. The Theodor Muller renovations for the Rockefeller family in the 1950s removed some of the exterior features and decorative details, including second- and third-story balconies on the south side and the southwest section of the veranda roof. The most visible change consisted of the removal of the dark gray paint from the exterior red brick walls and the repainting of the "artful and playful woodwork" in pure white, returning the Mansion to the original 1807 color scheme (quoted in Auwaerter and Curry 2005:Volume I, 181). Selected interior finishes and fixtures from the 1885–1886 renovations survive, including the hardwood paneling and trim in the principal rooms, built-in furnishings such as the library bookcases and dining room sideboard, fireplace mantels, stained-glass windows, and the Lincrusta Walton-style embossed wall coverings in the parlor and third-story music room. Many of the gas fixtures installed in 1886 also remain in the house, but most are in different locations (Porter/Miller Ink 2013: Part 1b, 28–29, 615–616; Yocum 2001b:34)

Henry Hudson Holly

The New York architect and pattern book author Henry Hudson Holly (1834–1892) grew up on Fifth Avenue in New York City, where his father, a prosperous merchant, served as Alderman between 1840

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

and 1850. Henry apprenticed himself to the British architect Gervase Wheeler in 1850 and went to Europe in 1856 to study European architecture. Upon his return, he opened his own firm in New York City and was elected to membership in the newly established American Institute of Architects in 1857. Holly maintained an independent practice for most of his career, until he formed a partnership in the late 1880s with Horatio F. Jelliff (1844–1892), an apprentice in his office. Examples of Holly's designs for country estates include Rockland in Stamford, Connecticut (1875, demolished); Glenmont in Lewellyn Park, New Jersey (c. 1880); and Rosemount in Pueblo, Colorado (1892–1893). In 1887, the year after the completion of his work on the Billings Mansion, Holly designed the main laboratory building for Thomas A. Edison's new facility in West Orange, New Jersey. Glenmont, where the Edison family lived, and the Main Laboratory are located within the Edison National Historic Site. Holly also published a number of influential works on architecture, including *Holly's Country Seats* (1863), *Church Architecture* (1871), and *Modern Dwellings in Town and Country* (1878), which included a chapter on alterations to existing houses (Porter/Miller Ink 2013:Part 1a, 615–616).

By the early 1880s, Holly had become one of the leading American proponents of the Queen Anne style, developed in England during the 1860s as a revival of the transitional early Renaissance architecture of the late seventeenth and early eighteenth centuries. Queen Anne buildings characteristically featured asymmetrical massing with many bay windows, gables, and complex roofs. Often finished in red brick, they also frequently incorporated pseudo-half-timbering, stained-glass or leaded-glass windows, and decorative shingles and wood trim. Holly argued in his 1878 book *Modern Dwellings* that Queen Anne architecture best expressed the American vernacular because it blended with the landscape and capitalized on the natural features that many American country homes offered. He felt that buildings, particularly country houses, should have "irregularities, such as projections of roofs, canopies, verandas, and baywindows, together with the intersections of gables, dormers and the height of chimneys" that would help to achieve the "strong contrast of light and shade which assists materially in producing good effects in buildings" (quoted in Porter/Miller Ink 2013: Part 1a, 45). Many aspects of his designs for the Billings house, including the original exterior color scheme, followed the guidelines outlined in his *Modern Dwellings* (Porter/Miller Ink 2013: Part 1a, 615–616).

Belvedere Complex

The Belvedere complex that overlooks the Terrace Gardens west of the Mansion comprises several architecturally significant buildings constructed between 1872 and 1956. The two-story, octagonal Belvedere at the east end of the complex is a distinctive example of the Swiss Chalet and Stick architectural styles and the eclectic work of the Danish-American architect Detlef Lienau. Lienau also designed the one-story Bowling Alley attached to the west end of the Belvedere and, in collaboration with Frederick Lord of Lord & Burnham, the rectilinear Greenhouse attached to the south wall of the Bowling Alley. The only one remaining of four greenhouses in the original complex, the Greenhouse (originally referred to as the Grapery) retains historic building fabric elements from its original construction in 1872–73 and the c. 1902 rebuild by Lord & Burnham, the country's largest and best-known greenhouse manufacturer during the late nineteenth and early twentieth centuries. It is a representative example of early twentieth-century horticultural architecture that embodies the characteristics of first-generation, iron-frame, domestic greenhouses. The Rockefeller family's architect, Theodor Muller, designed the Garden Workshop, added to the west end of the Greenhouse c. 1956, as an unobtrusive service space that does not detract from the architectural integrity of the rest of the complex.

For the design of the Belvedere, which in many ways is a larger version of the summer house "follies" on the estate, Lienau drew from the wide variety of stylistic influences available by the 1870s to architects

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

working in the United States. The publication of the first popular pattern book of house styles, Andrew Jackson Downing's Cottage Residences in 1842, introduced American designers to various alternatives to the prevailing Greek Revival style. Subsequently, more buildings featured designs based on medieval Gothic or Italian Renaissance architecture, and some displayed more exotic treatments based on Egyptian and Oriental precedents and Swiss chalets or octagonal shapes. Lienau's own contribution to the varied architectural vocabulary of the mid-nineteenth century was the introduction of the French Second Empire style in 1851. Downing's picturesque ideals and the Gothic Revival style inspired the so-called Stick style, which appeared after the Civil War and flourished in house pattern books of the late 1860s and 1870s. Distinguished by flat boards that outlined and organized the exterior elevations of buildings, Stick designs stressed the wall surface itself as a decorative element, finished with a variety of siding materials or textures. The closely related but more widespread Queen Anne style of the 1880s and 1890s further developed this emphasis on patterned wood walls. The varied eclecticism of the Belvedere presents an interesting contrast to the Queen Anne renovation of the Mansion undertaken ten years later (Kramer 2006:15; McAlester and McAlester 2002:177).

The Belvedere's design reflected its location on a hill that offered expansive views of the property, nearby mountains, and the town of Woodstock. The word "Belvedere" originated in Italy in the sixteenth century and generally referred to a summer house or structure placed in a spot that commanded a view. It was not used commonly in the United States until the mid-nineteenth century, when the term was also applied to roof structures such as cupolas that became a popular feature of Italianate, Second Empire, and Octagon houses. Lienau's Belvedere featured a low-slung cross-gable roof, wide overhanging eaves with brackets and exposed rafters, fanciful scrollwork detailing, and a second-story veranda beneath the facade (east) gable. The building resembled the picturesque Swiss Chalets suggested by Downing in his 1850 book The Architecture of Country Houses as particularly suitable for "bold and mountainous" sites or, as at the Billings property, "the bottom of a wooded hill" (quoted in Auwaerter and Curry 2005:69). Rarely built in the United States, Chalet-style houses generally featured front gables with extended overhangs and second-story gable-end porches or balconies with decorative railings.²⁹ Additional characteristics of the style included flat, cut-out patterned balustrades and trim, as well as the patterned stickwork decoration of exterior walls also typical of the Stick style, all of which are found on the Belvedere. The building's eight-sided plan references the Octagon style, a relatively rare idea popularized in the 1850s and 1860s. Most Octagon houses are two-story with low-pitched hipped roofs and wide eave overhangs, typically with brackets. Lienau chose to downplay the exterior appearance of the Bowling Alley connected to the west side of the Belvedere and not seen from the Mansion. The simple, long, low, rectangular building has a low-pitched shed roof and brick walls painted white. It initially housed two candlepin bowling lanes and service spaces for the complex.

The extant Greenhouse, comprising the granite piers and lower brick walls of the 1873 south foundation and the 1902 iron-frame-and-glass superstructure, represents the maturation and standardization of iron-frame greenhouse construction by the turn of the century, largely as a result of work by Lord & Burnham and several other greenhouse manufacturers. Until the late nineteenth century, American greenhouses had heavy wood frames, which not only were susceptible to rot but also cast heavy shadows that inhibited plant growth. Iron framing provided a remedy to these conditions and, following the precedent of New York's Crystal Palace (1852) and Philadelphia's Horticultural Hall (1875), Lord & Burnham first used iron framing in an American greenhouse in 1881 at the conservatory at Lyndhurst in Tarrytown, New York. The Lyndhurst conservatory featured an unprecedented light and durable iron structure with a skin

²⁹ There are only a few dozen surviving examples of Chalet-style buildings in the United States (McAlester and McAlester 2002:231).

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

of lapped glass set in wood bars, setting the standard in greenhouse construction for the next 60 years. The superstructure of the Billings Greenhouse exhibits characteristic features of the Lyndhurst model, including a white-painted iron frame, white-painted rot-resistant cypress glazing bars with lapped plate glass, and crank-operated continuous ventilating sash. The rectilinear eaves are more typical of commercial greenhouses than ornamental estate ones, possibly reflecting the shifts in usage of the structure by the Billings family over time. Alterations to the Greenhouse since 1902 include the 1930 demolition of the Tropical House abutting the east end; the removal of a 50-ft section at the west end in 1940, replaced c. 1956 by the wood-frame Garden Workshop (designed and constructed by the Rockefeller family architect Theodor Muller); and the construction of a door, window, and low brick wall at the east end and a door into the Bowling Alley c. 1959 (Auwaerter 1992:88–94, 220–221). In recent years, the National Park Service rebuilt the upper moveable windows, drained and removed the original heating system, and installed two solar panels for hot water and a propane hot water system with output into the Greenhouse that is used only for periodically melting snow build-up on the glass.

The Billings family made only minor alterations to the Belvedere and Bowling Alley portions of the complex after 1873. These consisted primarily of repairs and minor upgrades, including the 1942 addition of a small washroom/dressing room in the basement of the Belvedere. In the late 1950s, Muller prepared the plans for a more substantial renovation of the two spaces. The majority of Muller's changes occurred on the interior, where he added two new changing/bathrooms in the basement, reconfigured the stairways, replaced the heating system, converted the first-floor bathroom to a snack bar open to the bowling alley, leveled and refinished the alley lanes, installed automatic bowling equipment, and added a bathroom and closet on the second floor. Exterior alterations were confined to the relocation of doors and windows in the south elevation of the Belvedere, which had originally been attached to the Tropical House but now opened directly onto the Pool Terrace. The Belvedere and Bowling Alley together are a relatively rare surviving example of Lienau's later work in the eclectic Swiss Chalet and Stick styles that retain integrity to the 1873 construction date.

Detlef Lienau and Frederick Lord

Born on February 17, 1818, in a small town north of Hamburg (at that time part of Denmark, now belonging to Germany), Detlef Lienau (1818–1887) studied architecture in Germany and Paris and practiced briefly in Europe, working in the office of the progressive French architect Henri Labrouste between 1842 and 1847. Lienau immigrated to the United States in 1848 and practiced architecture through 1887, one of only a few European-trained architects in the country at the time and one of 13 founding members of the American Institute of Architects (1857). He is credited with introducing the French Second Empire style, especially the Mansard roof, to the United States. His work was both classically influenced and eclectic, ranging from the Chalet and Stick-style cottages he designed in the 1840s and 1850s (and revisited in the Belvedere) to the Beaux-Arts townhouses, apartment buildings, clubs, and public buildings he completed in New York City later in his career. In addition to significant numbers of commissions in New York, Lienau built a variety of country houses in the Northeast and elsewhere, including the Lockwood-Mathews Mansion (1864) in Norwalk, Connecticut (Kramer 2006:32–34, 240–250; Porter/Miller Ink 2013:Part 1b, 2).

Frederick Lord, a carpenter, began building greenhouses in Buffalo, New York, in 1849. In 1854, he moved to Syracuse, and in 1866 he founded Lord's Horticultural Manufacturing Company and soon established a clientele among wealthy estate owners in the Hudson Valley. In 1870, Lord moved his operation to Irvington-on-Hudson to be closer to his major customers. When his son-in-law William

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

Addison Burnham became his business partner in 1872, the company became Lord & Burnham (which merged with Hitchings & Co., established in 1844, in 1905) (Porter/Miller Ink 2013:Part 1b, 2).

Lienau and Lord worked together on at least one occasion previous to their collaboration at the Billings estate. In 1852, Lienau designed an Italianate stone "villa" for Francis Cottenet, a French-born silks and fancy goods importer, in what was then Dobbs Ferry, New York. In 1858–1860, he designed extensions (including a conservatory) and outbuildings (including a greenhouse) built by Frederick Lord. The house, now known as Nuits, and its attached conservatory survive, but the greenhouse is no longer standing (Porter/Miller Ink 2013:Part 1b, 2).

Theodor Carl Muller

Theodor Carl Muller (1904–1990), a German American architect and interior designer, earned his architecture degree from the Massachusetts Institute of Technology in 1926. In the late 1930s and 1940s, Muller was a partner in two different firms: Muller & Anderson Associated Architects of Boston and then Muller-Barringer of New York City. In 1948, he won a Gold Award for furniture design from the American Institute of Design, and by 1952 he was designing fabrics for F. Schumacher & Co., a New York textiles and wallpaper retailer. In c. 1954, he established his own firm with offices in New York City and Westport, Connecticut. Laurance Rockefeller's brother Nelson hired Muller in 1939 to redecorate two of his houses. After seeing his work, Laurance and Mary Rockefeller became one of Muller's most important clients, employing him regularly until his retirement c. 1980. In addition to his work on the family's Woodstock estate, Muller worked on a number of Laurance and Mary's local commercial ventures, including the Woodstock Inn and the ski lodges at Mount Tom and Suicide Six. He also undertook multiple renovation and interior design projects at the Rockefellers' New York City apartment, their house on Fishers Island in New York, and their residence and guest house on the family estate in Pocantico Hills, New York. Muller worked on a variety of projects for other wealthy clients throughout the Northeast from Vermont to Washington, D.C. (Porter/Miller Ink 2013: Part 1a, 629–631).

Fallout Shelter Systems

The fallout shelter systems designed by Theodor Muller for the Mansion and the Belvedere are significant in the area of Architecture as exceptionally well-preserved examples of large, architect-designed, private fallout shelters with pre-fabricated components. Constructed between 1962 and 1965, the shelters represent a distinct type of Cold War-era American civil defense architecture.

The Office of Civil Defense Mobilization (OCDM) produced booklets with titles like *The Family Fallout Shelter* (1959) and *Family Shelter Designs* (1962) that gave basic instructions and schematics, lists of required materials, and estimated costs for private do-it-yourself fallout shelters. The plans featured by the OCDM were generally intended to be constructed easily by one or two people in a weekend and to hold a family of two to four. In 1961, the Defense Department issued the following standards for contractor-built fallout shelters: radiation protection factor of 100 (meaning people inside would be 100 times more protected from radiation than someone outside); useful life of at least five years; at least 100 cubic feet of space; and equipped to prevent dangerous buildups of contaminated air and minimize fire danger. Similar standards were incorporated into the OCDM plans issued in 1962. Most of the widely available shelter plans concerned themselves with protecting people from radioactive fallout, rather than the percussive blast from an exploding bomb. Pre-made shelters sold by companies with names like Wonder Building Company, Peace-o-Mind Shelter Company, and Lancer Survival Corp promised to protect four to six

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

people from fallout for up to two weeks (Goshko 1961b; OCDM 1959; OCDM 1962:2; Woestendiek 2001).

Plans available for fallout shelters fall into three main categories, with many variations. Theoretically, basement shelters were easiest to construct, either as part of the new construction of a house or as a retrofit, and could be separate rooms, reinforced corners with two walls and a reinforced ceiling added, or lean-tos built in the "best" corner. Slightly more complex, aboveground fallout shelters were generally constructed of concrete or cinder block, but some were tent-shaped structures constructed of wooden panels covered with several inches of dirt. The most ambitious type of shelter, external underground fallout shelters, involved digging a large pit; lowering a pre-fabricated shelter into it or constructing a shelter using poured concrete, steel, or fiberglass; devising ventilation and access methods; then covering the shelter with dirt. A contractor typically installed this type of shelter. The October 14, 1961, edition of the *Science News-Letter* gave readers estimated costs for shelters: \$300 for a do-it-yourself basement shelter built of brick or clay tiles filled with sand; \$500–\$700 for a basement shelter added during new construction; \$800–\$1200 for an underground clay masonry structure built outside the house walls; \$900–\$1250 for an aboveground outdoor shelter; and \$1200–\$1700 for an aboveground blast and fallout shelter built of reinforced brick (Meier 1961:259).

The architect-designed fallout shelter systems at the Mansion and Belvedere consist of retrofitted reinforced concrete basement shelters augmented with essentially self-contained pre-fabricated metal tank shelters. Supplied with food, potable water, chemical toilets, bunks, and ventilation apparatus, both shelter systems appear to match the OCDM standards for contractor-built shelters and have exceeded the required five-year life span. Each shelter system could accommodate approximately 40 people, much more than just Laurance and Mary's immediate family. They may have been intended to shelter friends and family who would make their way to Vermont from larger metropolitan areas such as Boston and New York City. As people began to understand the dangers associated with radioactive fallout, rural areas like Woodstock began to seem less inherently safe. In addition, rural families were expected to shelter and assist refugees from the cities who would be instructed to evacuate to rural areas (Barker-Devine 2006:416–417).

The majority of known extant fallout shelters in the United States are in varying stages of disrepair or decay. Many external shelters are filled with water, vermin, and mold; internal shelters were often repurposed so thoroughly that they are nearly unrecognizable. Laurance and Mary's shelters are an exception to this and in an unusually high state of preservation. Although the shelters were never used, Laurance and Mary ensured that they would be ready at a moment's notice by having the staff periodically inspect and replace supplies. This practice continued until 1990, when the food was replaced for a final time under the Rockefellers' auspices. In the early 1980s, the Belvedere tank shelter suffered severe water damage and was considered uninhabitable, emptied of its contents, and abandoned. Although Laurance did consider filling in the tank shelters, they instead remain intact as built, making this system a rare surviving example of Cold War era fallout shelters. The National Park Service performed mold mitigation on all the shelters in 2007 and again in 2014 (Hand 2014; Porter/Miller Ink 2013: Part 1b, 48, 83).

Summer Houses

³⁰ The "best" corner was considered to be the most protected from fallout by virtue of being the furthest below grade if the ground was uneven.

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

The Upper Summer House and Lower Summer House are two rare surviving examples of nineteenth-century rustic garden architecture. Construction of the Upper Summer House was complete By March 1873; construction of the Lower Summer House followed in 1874 or 1875. No information is available about who provided the actual designs for the structures, although it may have been Detlef Lienau, the architect for the Belvedere complex built on the estate at about the same time. Stylistically, the two summer houses resemble the Adirondack camp architecture of the 1870s, which drew upon Swiss chalet forms and the Eastlake and Stick styles.

Tour guides erected the earliest Adirondack lean-tos, made of poles covered with bark, as temporary shelters for wilderness tourists. Carpenters later built more permanent structures for use as "decorous shelters" at sanitariums, permanent Adirondack camps, and on the grounds of resort hotels using whole, split, or peeled logs; bark; roots; burls; and native granite fieldstone. Typically square, oblong, or polygonal in shape, these open gazebos, summer houses, or pavilions (sometimes referred to as "follies") were usually placed on an elevated spot where one could catch the breezes and surrounding views and finished with twiggy brackets. Such structures became a popular fixture in nineteenth-century landscape gardens, where they often served as focal points in the design. Both summer houses on the Billings property are square pavilions of similar size but feature different openings and twig detailing. Rough tree trunks and branches are used for the trim, and twigs set in herringbone patterns form the siding (Gilborn 2000:159, 197; Van Slyck 2006:26–27).

Estate Outbuildings

The Coachman's Cottage (aka Double Cottage/Caretaker's Cottage), Woodshed (aka Woodbarn), Garage (aka Generator Garage), and Stable (aka Carriage Barn/Visitor Center) are all architecturally significant as representative country estate outbuildings from the late nineteenth or early twentieth century designed to serve particular estate-related functions.

Frederick Billings had the Coachman's Cottage constructed as a residence for his coachman sometime between 1870 and 1880, possibly using materials from earlier buildings on the property.³¹ The building comprises two staggered, one-story, side-gabled sections. The eastern section appears to have served as the original main living space, with the western section likely constructed as the kitchen wing. The latter may have been expanded to its existing dimensions as part of 1887 alterations noted in Billings' diary. Renovations in the mid-1940s added a second-story bathroom in the eastern section. In the 1960s, the Rockefeller family converted the single-family cottage into the current configuration of two adjacent apartments without substantially altering its overall appearance. The work included the replacement of the front porches, the relocation of a dormer from the north side of the western section's roof to the southwest side, the addition of a large dormer to the north side of the western section's roof, the addition of a fireplace and chimney at the west end of the building, the removal of the original kitchen chimney down to the basement, the enclosure of the west porch and attached privy, and modifications to the interior layout. With the exception of a small addition to the north side of the east apartment, the building remains as it appeared c. 1960. Its overall form, massing, and architectural style are typical of late nineteenth-century vernacular houses in the region.

The Woodshed also dates to the 1870s estate improvements undertaken by Billings. Completed in June 1876, the structure functioned as the central location for timber and firewood harvesting on the estate

³¹ The building is first mentioned in Billings' diary in April 1877. Materials from several buildings constructed on the property between c. 1789 and 1805 and removed or dismantled as part of the extensive renovations carried out by Billings after 1869 may have been used in the construction of the cottage.

Marsh-Billings-Rockefeller National Historical Park Name of Property

Windsor County, VT County and State

through the late 1950s. It was built into the side of the bank along the edge of the main carriage road, a convenient location for transporting wood from the Mount Tom forest. The open lower level of the long and narrow, end-gabled shed allowed easy access from the Woodshed Yard to the large storage bays. The only substantial alterations to the structure occurred c. 1900, when the upper floor was extended to the road and a bay was added to the north end. A 2008 National Park Service rehabilitation enabled the use of the upper floor as exhibit space. The shed continues to convey its original utilitarian purpose through its form, massing, and fabric.

Constructed for Julia Billings in 1895, the Stable is a relatively unaltered example of an architectdesigned, Queen Anne-style stable. Julia's nephew Ehrick Kensett Rossiter, partner in the New York architectural firm Rossiter & Wright, prepared the plans for the building, with assistance from the Billings' farm manager George Aitken. Pre-1895 photographs indicate that the c. 1869-1870 Billings stable stood on the same site as the existing building, with the same alignment. Rossiter was familiar with the site, having designed an addition to the old stable in 1884. The new stable was larger in plan than the old one, with a roof design and siding materials consistent with the popular Queen Anne style used in the 1885-1886 renovations to the Mansion. In addition to its fashionable design, the Stable contained "all modern improvements and conveniences looking to the comfort of horses" and provided spacious accommodations for the Billings family's extensive carriage collection, including a carriage-wash room (quoted in Coffin et al. 1997:103). The only substantial alterations made to the building before the death of Julia Billings in 1914 were the replacement of the gas-lighting system with electric lighting (1899-1900) and the installation of a telephone outside the coachman's office (1908-1909). Two extensive rehabilitations to the Stable have respected the historic integrity of the building: work done from 1976 to 1982 to adapt the interior for use by the Vermont Folklife Project and in 1999 to convert the building to the primary visitor center and administrative headquarters for the NHP. The Stable retains its original square two-story massing with a cross-gable roof; primary entrance in the south elevation; stone and brick foundation (including portions of the 1869-1870 stable foundation); center cupola with railing and weather vane; and fenestration patterns. Replacement work has duplicated the original in materials, design details, and construction methods. Despite alterations to accommodate new functions, many features of the building's original interior layout have been retained, including the loft story's large, open, two-story space; multi-planed roof; and center queen-post truss with exposed upper chords and end posts.

Although no record of an architect for the Garage, built in July 1908, exists, architectural details such as the use of concrete, a relatively new building material at the time of construction; the scored wall surfaces that emulate ashlar masonry; and the proportionality of the hipped dormers and roof suggest that an architect or master craftsman may have been involved in the design. Physical evidence indicates that the original interior plan consisted of a single open room without a separate attic space. The addition of a modern ceiling with a drop-down stair between the ground level and the attic likely occurred c. 1960, when the Rockefeller family installed an oil-fired Fairbanks-Morse electrical generator (moved outside the building in 2010). The building retains its original form and massing, typical of a relatively large, early twentieth-century, residential garage.

Ehrick Kensett Rossiter

Ehrick Rossiter (1854–1941), the architect of the 1895 Stable on the Billings estate, was the son of Julia Billings' sister Anna Parmly and the painter Thomas Pritchard Rossiter. He earned an architecture degree from Cornell University in 1875 and practiced architecture in New York City from 1877–1911, first with classmate Frank A. Wright and later with John Muller. He designed residential, institutional, and public buildings throughout the Northeast but is most known for his country houses in the Queen Anne and

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

Colonial Revival styles. In 1882, he published *Modern House Painting*. Frederick Billings consulted Rossiter for architectural advice on a variety of projects at his houses in Woodstock and New York City.

Bungalow

The Bungalow, designed by architect H. Van Buren Magonigle and constructed in 1917, is significant as a representative example of the Craftsman style in American architecture. Americans adopted the term "bungalow," which originated in India, in the late nineteenth century. Many wealthy families began building cabins, camps, and cottages sometimes referred to as bungalows in rural settings across the United States, usually for summer use. These vacation houses generally occupied a site with a view and featured large living rooms with airy windows, relatively open plans with good ventilation, and broad porches or verandas. Finished expensively and fitted with every modern convenience, they typically incorporated rustic features such as wood paneling, large fireplaces made from local stone, and exposed beams. As more Americans began emulating the bungalow type in other settings, the definition of the word broadened to apply to any small, one-and-one-half-story rectangular house with a wide front porch, a low silhouette, and a rustic feel that "suggested that vacation cottages and an informal way of life were now available to all" (quoted in Porter/Miller Ink 2013:Part 1b, 89).

Bungalows came in many forms and styles but, after becoming popular c. 1900 in California, were frequently designed in the Craftsman style. Born out of the English Arts and Crafts movement, the Craftsman style represented an independent American architectural movement begun in the West that spread nationwide from c. 1900 to 1930. The typical Craftsman bungalow had a wide, low-pitched, overhanging roof; a deep front porch; and grouped casement windows. The roof often featured a "kick," or an angle or flare created when the roof pitch changes near the eave. Architectural details such as built-in cabinets and cozy inglenooks, often crafted of fine hand-polished woods, generally embellished the bungalow's simple interior layout. The most common floor plan was rectangular with three or four rooms on the first floor, but some bungalows were square with a room in each of the four corners.

The Bungalow built for Mary Montagu Billings French fit in many ways within the various parameters of the bungalow type. It has a deep front porch and a low overhanging roof with an emphasis on the horizontal and a kick at the bottom. The roof shingles, clapboard siding, and cedar trim are finished in natural colors. The front door opens right into the living room that features a large fireplace, paneled walls, exposed ceiling beams, and built-in cabinets. Magonigle incorporated Craftsman-style elements into the design, such as brackets at the top of the porch pillars and under the railings. The house, which is larger than most one-story bungalows, also includes some atypical features, such as a floor plan with a large central space surrounded by rooms on three sides and a hipped roof with a clerestory, possibly adaptations of features of the Golf House that Mary wished to replicate.

The Rockefeller family implemented several minor alterations to the Bungalow between 1959 and 1961, designed by their architect Theodor Muller to respect the original appearance of the house. These included the addition of more clerestory windows to bring more light into the central room, the installation of a new kitchen, and the reconfiguration of some interior partitions. The overall form, massing, and interior layout of the building, as well as much of the original finishes, remain intact.

H. (Harold) Van Buren Magonigle

Harold Van Buren Magonigle (1867–1935), who generally used only the first letter of his first name, was born in New Jersey and apprenticed at the age of 13 in the New York City design office of Calvert Vaux

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

and George Kent Radford. Three years later, he went to work for Charles E. Haight, the architect of the Trinity Church Corporation in New York. In 1887, Stanford White of McKim, Mead & White in New York City hired Magonigle, then 20, as a draftsman. In 1891, Magonigle moved to Boston to work for Arthur Rotch and George Thomas Tilden, in part because he hoped to win the Rotch Travelling Scholarship for two years of study and travel in Europe. He passed the scholarship exam in 1894 and spent a year at the American Academy in Rome followed by a year in Paris. Briefly returning to McKim, Mead & White in the fall of 1896, Magonigle practiced alone after 1904 with offices in New York City and Greenwich, Connecticut. He completed a number of urban and country residences for wealthy clients, including a large Italian villa-style house and golf house for a private course at Villa Carola (1916), Isaac Guggenheim's estate on Long Island. He also produced designs for schools and institutions, such as the Arsenal Technical Schools in Indianapolis and Mrs. Dow's School in Briarcliff Manor, New York; public buildings, such as the American Embassy in Tokyo; and many churches. In addition, Magonigle designed several monuments, including the Firemen's Memorial and the Maine Monument at the entrance to Central Park in New York City, the McKinley Memorial in Kansas City, and several fountains. He also designed many utilitarian outbuildings and farm buildings, including a garage, cow barn, and gardener's cottage for Mary French's Greenwich, Connecticut, property. Also a sculptor, painter, and graphic designer whose works were exhibited across the United States, Magonigle wrote many articles and books about architecture and art (Porter/Miller Ink 2013: Part 1b, 88-90).

CRITERION C - ENGINEERING

The System of Carriage Drives and System of Estate Drives are significant under Criterion C in the area of Engineering for their ability to convey nineteenth-century principles of carriage road design and as rare intact examples of nineteenth-century carriage road systems in the United States.³²

Road building advanced significantly in the late eighteenth century, moving from simple dirt tracks or cobblestones to more sophisticated and smoother roads. Three European engineers—Pierre-Marie Jérôme Trésaguet, the Director General of bridges, roads, and municipal works in France; Thomas Telford, a stonemason from Scotland; and John Loudon McAdam, a road surveyor in Scotland-developed road construction techniques that were employed in the United States in the early nineteenth century. Trésaguet's contribution to the advancement of road construction was the use of angular stone, rather than rounded gravel, which created a more compact roadbed. Telford built on Trésaguet's work, noting that once the gravel surface of Trésaguet's roads wore away, the exposed base quickly deteriorated. His solution was to lay stone in a manner similar to brickwork on a base of bedrock, then taper stones at the top to provide drainage routes and wedge broken pieces of stone between the upper stones to prevent movement. Telford's system resulted in 6 inches of approximately 2.5-inch stones under a gravel surface. His method of road construction was used in New York City in the early nineteenth century. McAdam made the final advancement in road construction in the early nineteenth century when he used the base soil rather than stones to shape the camber of the road to encourage drainage. He then layered stones, with large stones on the bottom and smaller stones at the top, to create a more durable road. His system was adopted widely and appears to be the basis for the construction techniques used for the Billings carriage and estate drives (PDM et al. 2010:20-24).

³² The majority of the information in this section comes from the *Treatment Plan and Management Recommendations for the Carriage Road System* by Paul Daniel Marriott and Associates with Willis Consulting Engineers, 2010, and *Marsh-Billings-Rockefeller Carriage Roads*, Woodstock, VT, HAER No. VT-27, Historic American Engineering Survey, National Park Service, Washington, DC, 2001.

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

The Carriage Road Treatment Plan and Management Recommendations prepared for Marsh-Billings-Rockefeller NHP by Marriott and Associates identifies three types of historic roads: aesthetic, engineered, and cultural. Aesthetic roads are designed for scenic enjoyment, leisure, recreation, or commemoration and generally have a documented purpose and documented construction dates. The route of an aesthetic road follows the natural topography of a region and takes in scenic vistas and views or is routed to lead to a specific historic or recreational site. Engineered roads are more utilitarian in purpose, built for conveying people and goods from place to place. Based on concepts of efficiency of movement, ease of access, and cost effectiveness, these roads were not constructed with scenic qualities them in mind but are often recognized today for such attributes. Cultural routes evolved through necessity or tradition and include colonial roads, animal trails, and Native American paths or roads (PDM et al. 2010:8–10).

Nineteenth-century landscape theory attempted to combine the picturesque with the utilitarian. Frederick Law Olmsted Sr. employed these principles when laying out the circulation system for Central Park beginning in 1869, the same year Billings purchased the property in Woodstock. According to the philosophy of Humphry Repton as interpreted by Andrew Jackson Downing, carriage roads were intended to introduce an appreciation of the natural landscape through their curvilinear alignments designed to bring users to scenic vistas and overlooks and through the naturalistic plantings alongside the roads. Downing employed the specific Reptonian ideal that curvilinear routes should be logical and based on the physical landscape form to which they belonged rather than exist for their own sake. Nonetheless, picturesque carriage roads were still intended to be utilitarian. Olmsted Sr. and his partner Calvert Vaux designed a system of roads in Central Park that pass over and under pedestrian and bridle trails to allow each group unimpeded use of the grounds. They constructed the roads in a similar fashion to those later built on the Billings estate, using layers of progressively smaller stones until the surface consisted of small gravel. This technique was considered essential to the construction of pleasure drives, as it produced a smoother ride than the cobblestone streets found in cities. Robert Morris Copeland, who also submitted an entry for the Central Park design competition in New York City, provided detailed information on road construction in his 1867 book Country Life: A Handbook of Agriculture, Horticulture and Landscape Gardening that undoubtedly influenced the design for Billings' drives (PDM et al. 2010:17-20, 25, 35, 38-40).

In Vermont, Shelburne Farms in Shelburne, Red Rocks in South Burlington, and Mt. Philo State Park in Charlotte all have extant or traces of historic carriage roads. The roads at Shelburne Farms, laid out by Olmsted Sr. c. 1887, are similar to the roads on the Billings estate, designed to take riders past stands of trees and scenic vistas. Two other parks within the National Park System, Acadia National Park on Mount Desert Island in Maine and Moses H. Cone Memorial Park on North Carolina's Blue Ridge Parkway, have extensive systems of carriage roads constructed to take in scenic views and vistas. The roads at Acadia, arguably the most well-known carriage roads, were designed around existing lakes and ponds, rocky mountainsides and outcroppings, and meadows and streams. Trees surround much of the system, with openings in the treeline that frame views of the ocean, islands, and mainland. Funded by John D. Rockefeller Jr. and constructed beginning 1913, the Acadia roads embody many of the same principles as the earlier road systems on the Billings property, with the addition of large-scale features such as bridges and gatehouses. They are approximately 16 feet wide, constructed with a 6-inch base of larger stones, topped by 4 inches of smaller stones, and finished with 2 inches of small gravel and clay. Through his father's involvement with Acadia, Laurance Rockefeller likely gained an appreciation for scenic carriage drives and an understanding of their importance to a scenic landscape that inspired him to maintain the system created by Billings (Donnis 2000:6-7; OCLP 2013:2).

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

Some of the roads on the Billings estate may date to the Marsh occupation of the site, but the current System of Estate Drives and System of Carriage Drives date to the period between 1869 and 1898 when Frederick Billings had new roads constructed and connected to previously existing ones to create a complete network. The roads fulfilled some utilitarian purposes during the Billings era, including farming and forestry access on Mount Tom. However, they are considered predominantly aesthetic roads, designed to take in the beauty of the Vermont countryside. Constructed using McAdam's techniques, the majority of the roads consist of 6 inches of crushed stone over 6 inches of river gravel and rubble and are 14 ft 10 inches wide. The Main Entrance Drive is 2 ft wider, at 16 ft 10 inches, and has a 14-inch base of large stones under 18 inches of river gravel then 8 inches of crushed stone. The fairly labor-intensive construction process involved blasting and drilling through rock, then using crushed rock for the roadbed sub-layers and loose rock and soil for the surfaces. Machines were used to grade the roads; and culverts, outlets, and retaining walls were added to minimize and slow deterioration (HAER 2001; PDM et al. 2010:11).

The System of Carriage Drives and System of Estate Drives exemplify the curvilinear alignments, gentle grades, destination features, and vista points that characterized the layout of pleasure drives during the nineteenth century. Further, despite the replacement of materials over the past century, the existing roads represent typical late nineteenth-century road construction practices, as demonstrated by their width, center crown, cross slopes and ditches, and roadbeds consisting of a series of compacted gravel and rock layers.

CRITERION C - LANDSCAPE ARCHITECTURE

The District is significant in the area of Landscape Architecture as one of the earliest extant examples in Vermont of a late nineteenth-century designed landscape for a gentleman's farm and one of only a few such landscapes that illustrates continued development during a period of almost five decades (1869–1914). The current landscape includes design elements from the initial development of the property in the post-Civil War years as well as improvements made at the turn of the century that reflect contemporary trends in landscape design. Several well-known professional landscape designers, including Robert Morris Copeland, Charles A. Platt, Martha Brookes Hutcheson, and Ellen Biddle Shipman, contributed to the Billings estate. The 1894–1899 terrace gardens (the Flower Garden and Long Terrace) are significant as relatively intact and rare surviving examples of Platt's early work.

Landscape Design for a Gentleman Farm

The distinctive landscape developed by Frederick Billings and his heirs between 1869 and 1914 represents major stylistic trends in landscape design during this period integrated with the scientific forestry practices pioneered by Billings. In the initial years after Billings purchased the Marsh place in 1869, he worked with the Boston landscape architect Robert Morris Copeland to design a naturalistic and idealized rural landscape based on the prevalent style inspired by eighteenth-century English designs. Copeland's design unified the enclosed gardens and pastures of the Marsh place into a lawn dotted with clumps of trees and open to broad views. At the turn of the century, Billings' daughters added discrete formal and rustic gardens to the earlier landscape that reflected national shifts in landscape design related to the influence of the Arts and Crafts and Neoclassical movements as well as cultural connections to the nearby Cornish colony, the 1893 Chicago World's Fair, and European trends. These additions included formal elements designed by Charles A. Platt, Martha Brookes Hutcheson, and Ellen Biddle Shipman in the vicinity of the Mansion. They also included the wild, botanical, hillside gardens developed by

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

Elizabeth Billings that reflected a trend toward vernacular design characteristic of Arts and Crafts Movement and a growing interest in wild gardening across the country. When Frederick's widow Julia died in 1914, the estate landscape was at the height of its development. Few changes occurred after that time. Frederick and Julia Billings' granddaughter Mary French Rockefeller and her husband, Laurance Spelman Rockefeller, revived the estate landscape beginning in the 1950s but preserved much of its historic character. Thus, the grounds continue to illustrate the evolution of landscape design during the last quarter of the nineteenth century through the first quarter of the twentieth century, when the prevalence of country estates and model gentleman farms provided landscape designers with ample opportunities for study, experimentation, and creativity that directly influenced the trajectory of their profession.

Naturalistic Design, 1869-1890

Landscape design in the 1860s was based in large part on the eighteenth-century tradition of English landscapes developed for country estates by designers such as Capability Brown and Humphrey Repton. While earlier landscape design focused on strict geometry and enclosed spaces adjoining a house, such as the fenced-in garden and orthogonal lanes around the Marsh house, the English or Natural style as it was known applied the picturesque theory of aesthetics and embodied a romantic, idealized countryside represented by beautiful sweeping lawns, curving drives, and clumps of trees. The American landscape gardener Andrew Jackson Downing initially popularized the Natural style in the United States through his 1841 publication, A Treatise on the Theory and Practice of Landscape Gardening, Adapted to North America; with a View to the Improvement of Country Residences. Open, naturalistic, and romantic gardens with views of the surrounding countryside appealed to an increasingly industrialized and urbanized country preoccupied with a pastoral ideal. Interest in naturalistic landscapes followed similar romantic trends in architecture and interior design. Downing and others also incorporated sublime landscape features such as spiky evergreens (the Norway spruce was a favorite), craggy outcroppings, and rustic architecture (including the Gothic and Swiss styles) into the design of country places, reflecting the interest in America's wilderness popularized by the Hudson River School of painters. Olmsted and Vaux's Central Park in New York City, one of the pre-eminent mid-nineteenth century examples of American landscape design, combined both beautiful and sublime characteristics into a picturesque composition that reflected Downing's ideals.

Robert Morris Copeland (1830–1874) was born in Roxbury, Massachusetts, and attended Harvard College in the late 1840s, where he met Henry Wadsworth Longfellow and other Transcendentalist philosophers. In the early 1850s, Copeland practiced scientific agriculture on his own farm at Beaver Brook Falls near Lexington, Massachusetts, and developed the expertise in fruit culture, wood lot planting, and crop management that he published in his 1859 treatise on *Country Life*. From 1854 to c. 1859, he and Horace Cleveland operated a landscape and ornamental gardening business. The firm's projects included Sleepy Hollow Cemetery in Concord, Massachusetts; the Samuel Colt estate in Hartford, Connecticut; and the Oak Grove Cemetery in Gloucester, Massachusetts. After the Civil War, Copeland developed his own flourishing landscape architecture practice based in Boston. His projects in New York, Pennsylvania, and New England ranged from country places to community designs. He developed an early plan for a system of connected public open spaces in Boston's Back Bay, published as *The Most Beautiful City in America: Essay and Plan for the Improvement of the City of Boston* in 1872, two years before his sudden death (Birnbaum and Karson 2000:68–69; Nadenicek 2004:52–54).

Copeland's design for the Billings estate contained many similarities to the prototypical plan for a country place of 60 acres included in his 1859 treatise on Country Life: A Handbook of Agriculture, Horticulture,

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

and Landscape Gardening. His design philosophy followed squarely in the traditions of eighteenthcentury English country estates and the more recent American traditions advocated by Andrew Jackson Downing. Copeland proposed an idealized rural landscape in the Natural style, with winding drives and walks, expansive lawns, and naturalistic groupings of trees surrounding the focal point of the Mansion. The plan also preserved some features of the Marsh place, including a deciduous woodlot at the northwest corner of the grounds, an oak grove on the hillside, rock outcroppings and a boulder, and specimen trees. Copeland organized the spaces around existing viewsheds across the intervale to the east and south toward Woodstock Village and used grading to emphasize the landscape's natural character. He eliminated the existing stone-wall-enclosed pastures and fenced-in gardens, in favor of a sweeping lawn that flowed visually to the adjoining countryside, and replaced the orthogonal lanes around the house with a series of curvilinear avenues and paths threading through the lawn and across the hill. Picturesque features included a winding path that entered the grounds south of the Mansion and led through an openair pavilion up to a native boulder where a clearing provided a view of Mount Tom, as well as a large wooded area planted with evergreens in front of an existing large rock outcrop on the east slope of the hill behind the Mansion. He replaced the existing rectilinear rear service yard with service buildings located within a wooded area to the rear and north of the Mansion and laid out a large kitchen garden on the hilltop pasture west of the Mansion in an orthogonal pattern best for efficient growing.

Overlays of ornate garden features in the Gardenesque style often appeared in Natural-style landscapes of the late nineteenth century, reflecting Victorian tastes for ornament and detail as well as the discovery and widespread availability of tropical flowering plants from South America and the American Southwest. Showy lawn beds planted with a wide array of colorful annuals, often in imitation of Oriental carpets, ribbons, and fountains, characterized the fashionable Gardenesque feature known as "carpet-bedding" or "bedding-out," based on the precedent of the formal French parterre. These beds, typically placed close to the house, drew attention and provided a level of detail that bridged nature and architecture. Popular bedding plants included canna, salvia, coleus, centaurea, and lobelia, among many others. Vertical features, such as vases or spiky plants, sometimes punctuated the plantings. The popularity of bedding-out corresponded with the appearance of greenhouses on country estates, in which the tender plants could be forced in time to produce bedding displays during the temperate growing season. Interest in tropical foliage plants and in the building of conservatories for complete subtropical landscapes fostered the related trend known as the Subtropical Movement. Large, potted tropical foliage plants became fashionable components of formal lawns, supplementing bedding displays and providing a sense of exotic diversity to the landscape. Copeland incorporated a Gardenesque series of oval and rounded ornamental garden beds on the south, east, and north sides of the Mansion as well as beds along the veranda foundation that provided color and variety in keeping with the contemporary bedding-out fashion. He chose a site at the edge of the hill close to the rear of the Mansion for the essential greenhouses, which were oriented to the south for maximum sunlight. The head gardener, supervised by Billings, planted the carpet-bedding and other Gardenesque features of Copeland's plan about 1870. When the Mansion was remodeled in the late 1880s, Billings replaced the flowerbeds around the veranda with lawn, possibly at the suggestion of his architect Henry Hudson Holly.³³ By the early 1870s, Billings displayed pots of large tropical foliage plants on the lawn in keeping with the Subtropical Movement fashion.

In contrast to the ornate and exotic displays of bedding-out and tropical foliage, interest in more irregular and naturalistic garden plantings grew by the late 1860s and 1870s, paralleling the Aesthetic Movement in decorative arts and interior design. Natural forms and colors, asymmetry, and informality characterized Aesthetic design, which often featured stylized plant material as design motifs in architectural details and

³³ The designs in Holly's book Modern Dwellings all featured houses without foundation beds.

Marsh-Billings-Rockefeller National Historical Park Name of Property

Windsor County, VT County and State

interior finishes. Aesthetic sensibilities led to renewed appreciation for so-called "old-fashioned" gardens, reminiscent of colonial-era farmhouse gardens that contained an informal variety of plant materials, including perennials such as hollyhocks, foxglove, and phlox; vines and climbing roses; and natural-looking shrubs. The country's centennial celebration in 1876 also contributed to the increased popularity of old-fashioned gardens. Billings added informal flowerbeds along the Main Entrance Drive, planted with shrubs and other herbaceous plants that reflected Aesthetic sensibilities for irregularity and natural forms. He planted arborvitae clipped into rounded shapes at regular intervals along the drive and paths around the Mansion, and a short section of clipped hemlock hedge at the head of the Main Entrance Drive. In less formal areas, such as around the large boulder and summer houses, various deciduous shrubs were planted in more naturalistic groupings. In the early 1880s, Billings extended the rustic landscape that enveloped the Upper Summer House and boulder with a naturalistic border of shrubs planted along the edge of the lawn between the summer houses and the expanded greenhouse complex.

Most of the characteristic components of a late nineteenth-century Vermont gentleman farm remain on the Billings estate, including the main house, housing for domestic help, an elaborate carriage/horse barn, and a greenhouse. Typical landscape features introduced or refined by Billings and Copeland on Mount Tom include the open fields, pastures, woodlands, Pogue pond, winding carriage drives, stone walls, and hedgerows. The sloping lawns, flower gardens, naturalistic plantings, curving drives and walks, summer houses, and framed vistas nearer to the Mansion reflect the characteristic approach to landscape design in the 1860s and 1870s. The spatial organization, circulation patterns, lawns, and views included in Copeland's plan remain intact, but the landscape does not retain integrity as a representative example of his work because of later alterations to the main entrance drive, as well as the planting beds and gardens.

Neoclassical and Arts and Crafts Additions, 1890-c. 1914

An overall stylistic diversity characterized American landscape design in the quarter century between the deaths of Frederick and Julia Billings (1890–1914), but the rediscovery of neoclassical design dominated the period. The characteristic symmetry, formality, white surfaces, and classical details of several related styles generally identified as Neoclassical Revival, Renaissance Revival, or Beaux-Arts Classicism, popularized in the United States in large part through the 1893-1894 World's Columbian Exposition in Chicago, quickly replaced historicism derived from dark, medieval styles in the country's architecture of the latter 1890s. Landscape architecture, from large-scale city planning down to residential garden design, also witnessed a transformation of parallel significance, defined by the sudden preference for formal Italian gardens. The artist, architect, and landscape architect Charles A. Platt's popular 1894 work, Italian Gardens, documented sixteenth- and seventeenth-century gardens of the Renaissance. The first monograph of the subject in English, his book became a watershed in the theory and design of American gardens, spurring interest in neoclassical landscape design. Many estate owners updated earlier naturalistic landscapes with an overlay of neoclassical-style gardens located near the house but not necessarily connected to it or integrated into the larger landscape. These neoclassical gardens formed a type of outdoor room and generally incorporated the following features: (1) definite proportions of 7 or 8 to 5; (2) a change in grade formed by geometric terraces; (3) structure along a major axis; (4) a minor cross axis; (5) visual reinforcement of the axes through paving, walls, and plantings; and (6) a terminus to each axis, either through a piece of art, specimen planting, built feature, or a distant view. The older Natural style remained a favored design for informal landscapes situated away from the house, reflecting the continued interest in creating an idealized rural setting.

The Arts and Crafts Movement also had an important influence on garden and landscape design during the period from 1890 to 1914. The movement originated in Britain during the mid-nineteenth century as a

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

reaction to industrialization and mass production, led by John Ruskin and William Morris, that sought a return to pre-industrial conditions in the arts and crafts. By the 1880s and 1890s, it began to emerge as a recognizable style inspired by the vernacular traditions of the village and rural countryside. In the garden, the Arts and Crafts Movement built on some of the design ideals of the earlier Aesthetic Movement as well as so-called old fashioned gardens from the nation's colonial and pre-industrial period. As opposed to the earlier idealized naturalism of the Natural style, Arts and Crafts designs favored an informal naturalism that emphasized the harmony between culture and nature. Naturalized asymmetrical plantings, respect for natural site conditions, and use of native plant and vernacular building materials became the hallmarks of gardens designed according to Arts and Crafts principles. Gertrude Jekyll, the foremost Arts and Crafts garden designer in England, became equally well known in the United States through her numerous articles and books illustrating cottage gardens and her work with color and naturalized plantings in the perennial flower border.

At many American country estates around the turn of the century, neoclassicism and the Arts and Crafts Movement formed the basis for successful integration between architecture and nature. Neoclassicism provided the formal structure that designers sought to extend a house into the landscape, while Arts and Crafts elements such as rustic hand-laid stone walls and mixed perennial borders integrated the buildings with the surrounding natural landscape. Charles Platt, in particular, pioneered the unification of the Italian garden designs he studied and published and American landscape and vernacular gardening traditions. Platt belonged to the influential Cornish arts colony, located about 20 miles east of Woodstock on the New Hampshire side of the Connecticut River. The colony originated in 1885, when the great sculptor of the American Renaissance, Augustus Saint-Gaudens, took up residence in Cornish. Platt first came to the colony in 1889. In its heyday between 1900 and 1917, Cornish boasted a concentration of almost 70 prominent artists and writers, including painter Maxfield Parrish and sculptor Daniel Chester French.

The Cornish landscape and gardens, with its early nineteenth-century farmhouses and spectacular views west across the Connecticut River Valley to Mount Ascutney (reminiscent of the Italian countryside), provided the inspiration for Platt's earliest landscape work. Cornish's vibrant gardening tradition became well known across the country by the turn of the century. The *Century Magazine* of 1906, for example, praised Cornish gardens for balancing architecture and landscape and for taking advantage of the area's natural beauty with its mountain views, such as exhibited by the Herbert Croly garden. Although the Cornish gardens all differed, they shared a characteristic harmony between formalism and naturalism, portending the future popularity of neoclassical and Arts and Crafts-inspired garden design. They typically featured a profusion of old-fashioned naturalized plantings, with beds full of informal plants such as climbing roses, peonies, hollyhocks, and sweet william, on an underlying structure of axial paths, focal points, and architectural elements.

Following Frederick Billings' death in 1890, his family and estate trustees, primarily his three daughters, oversaw continued improvements to the Woodstock landscape according to his wishes. Laura, Mary Montagu, and Elizabeth Billings all had strong interests in landscape design, botany, and gardening, but Elizabeth, in particular, developed a passion for the subjects. Rather than completely redeveloping the landscape, the Billings women preserved the overall picturesque and romantic character developed by Frederick Billings but incorporated updated garden features that followed America's interest in neoclassical and vernacular Arts and Crafts design. In addition to planning many grounds improvements themselves, the Billings family provided several pioneering female landscape designers with professional opportunities at the very beginning of their careers. The changes they made reflected national design trends, personal family interests, and estate management needs, as well as the family's social connections with the nearby Cornish arts colony. Laura Billings and her sisters often visited the Cornish art colony

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

throughout the 1890s, calling on the Platt family as early as September 1891. The Platts also came on occasion to visit the Billings family in Woodstock. In the summer of 1904, Laura and her husband, Frederick, rented a house in Cornish for the season. The growth of the local summer society in Woodstock may also have given the Billings women added impetus to improve the Mansion grounds. The opening of the new Woodstock Inn in 1892 and the golf course in 1896, for example, occurred around the same time that they updated the estate gardens. Elsewhere in Vermont, newer country estates at Shelburne Farms, Hildene, and The Orchards all featured extensive formal gardens in fashionable neoclassical styles.

Beginning in 1891, the Billings women replaced the stylized carpet beds and clipped arborvitae on the Mansion lawn with more informal, "old-fashioned" plantings. Possibly inspired by the Cornish gardens, they added long beds of begonias, geranium, and peonies along the Main Entrance Drive and veranda and vines trained on cords strung up and down the entire veranda. They also diversified the plantings around the Mansion and along the drives with flowering deciduous shrubs and ornamental trees. In the fall of 1894, one year after visiting the World's Columbian Exposition in Chicago and during the year in which Platt's *Italian Gardens* appeared in print, Laura Billings finalized plans designed by Platt for her family's own neoclassical garden, which they called the terraces or terrace gardens, On October 26, 1894, Laura was in Cornish, probably discussing the garden plan with Platt. Sited on the sloping land below the greenhouse complex, the plan included a 60-ft-square garden set on a stepped terrace and divided into four geometric borders with a central focal point (known as a quincunx plan), later called the Flower Garden, and the stepped Long Terrace extending from the Flower Garden along the slope parallel with the greenhouses. Perimeter hedges enclosed both gardens; and neoclassical furniture, including a central fountain in the Flower Garden and benches terminating the main and cross axes on the Long Terrace, provided focal points within them. The neoclassical plan also incorporated Arts and Crafts-inspired features such as dry-laid stone retaining walls and old-fashioned herbaceous plantings.

Elizabeth Billings focused her landscape design efforts on the more informal foothill behind the Mansion. where she greatly expanded her father's hillside gardens over the course of several years between c. 1893 and c. 1901. Her work on the Fernery and Lily Pond Garden reflected aspects of a more naturalistic trend in Arts and Crafts design known as wild gardening, which had its origins in the mid-nineteenth-century interest in newfound exotics. "Ferneries" (gardens devoted to ferns), an early type of wild garden often established in an outdoor glen or rockery, appeared in Britain in the late 1840s and 1850s. The Englishman William Robinson's 1870 book, The Wild Garden, spurred a broader interest in wild gardening. Robinson advocated for the artistry found in wild nature, such as an alpine or Mexican desert landscape, in opposition to the predominant scientific and formal artistry of Victorian landscapes epitomized by carpet-bedding. Gertrude Jekyll published examples of woodland gardens in her 1899 work Wood and Garden that reflected this more wild side. Jekyll considered such gardens, characterized by rustic grass paths and roads lined by woodland flowers and native woods, to be important extensions of the more formal gardens located near the house. Elizabeth Billings owned a copy of Wood and Garden and during the 1890s subscribed to Garden and Forest/A Journal of Horticulture, Landscape Art, and Forestry, founded in 1888 by Charles Sprague Sargent of the Arnold Arboretum. By the end of the nineteenth century, Garden and Forest represented the diverse range of interests in native and designed landscapes, publishing, for example, columns on water gardens and wild gardens. In 1894, Elizabeth and her sister Laura enrolled in a botany course at Barnard. In later years, Elizabeth became very active in the Vermont Botanical and Bird Clubs and the Hartland Nature Club and published three booklets on local fauna and flora. She engaged the services of the assistant curator at the New York Botanical Garden, Elsie Kittredge, in 1917 to assist her in documenting Woodstock's native flowering plants. The two women

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

assembled a collection of 1,127 mounted specimens entitled "Flora of Woodstock" and later known as the Billings-Kittredge Herbarium.

Jekyll's landscape design career exemplified the expanding role of women in the related areas of civic beautification, garden design, and the burgeoning profession of landscape architecture. Following the Civil War, gardening became a socially acceptable activity for women of wealthy families, and an especially useful one for those who summered on rural estate farms. This same period witnessed the publication of many books on gardening, most written by women. By the early twentieth century, numerous women's garden clubs and societies gave women a public voice in civic horticulture and beautification efforts. This horticultural experience also provided women opportunities in landscape architecture, which developed into a formal profession between the Civil War and the early twentieth century. The eleven founding members of the American Society of Landscape Architects, established in 1899, included one woman, Beatrix Farrand. Other women landscape architects practicing around the turn of the century included Martha Brookes Hutcheson and Ellen Biddle Shipman, both of whom worked for the Billings women on the grounds of their Woodstock estate.

Mary Montagu Billings hired Martha Brookes (née Brown) Hutcheson (1871-1959) to redesign the approach to the Mansion in 1902, when Hutcheson was studying landscape design at MIT and botany and horticulture at Harvard's Bussey Institute. Hutcheson was born in New York City and spent her childhood summers on a family farm near Burlington, Vermont. From 1893 to 1895, she attended the New York School of Applied Design for Women; in the late 1890s, she visited gardens throughout England, France, and Italy. Her work for the Billings family, one of her earliest known professional commissions, typified her fundamental design philosophy, which combined elements of formal neoclassical European design with informal Arts and Crafts-inspired plantings in the spirit of Platt's work. Hutcheson altered Copeland's original design for the Main Entrance Drive by changing the curving loop at the Mansion into a more neoclassical circular drive, clearly separated from the rear service area. She also removed the outdated entrance gates and the curvilinear pathways around the house. Hutcheson's design included a program of dense shrub planting along the drives and walks and around the house and laundry. Consisting of a mix of old-fashioned and native shrubs, the plantings extended the informal, woodland-like, naturalistic landscape of the hill and summer houses through the lawn and around the Victorian buildings, making them less prominent. The reconfigured entrance drive remains relatively intact, but the Rockefellers removed Hutcheson's plantings c. 1957 (Birnbaum and Karson 2000:188-191).

Hutcheson made additional contributions to the Billings estate landscape. In 1904, she designed the informal Arts and Crafts-inspired Wood Drive that winds through Elizabeth's hillside gardens, following the natural topography, and the retaining wall along the drive and adjacent stairway and bench, all constructed of native stone. Hutcheson may also have suggested that the Billingses plant a continuous hedge along the Elm Street perimeter of the property. The neoclassical style of landscape design favored enclosed spaces, making hedges extremely popular in the early twentieth century. Beginning in the fall of 1905, the family's farm manager George Aitken oversaw the planting of a new hemlock hedge above the stone perimeter wall, extending from the Main Entrance Drive to the summer houses and around the triangular island at the entrance. In subsequent years, gardeners kept the hedge clipped in a rectangular shape about four feet in height.

As early as the summer of 1910, Elizabeth Billings considered updating the plantings in the terrace gardens, many by then 15 years old and needing renewal, and may have contacted Platt for advice. The following fall, Cornish resident and gardener Ellen Biddle Shipman (1869–1950) came to Woodstock, possibly in place of her mentor Platt, to help with a redesign of the estate gardens and plan other

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

beautification efforts in the village. Shipman was born in Philadelphia but grew up in Texas and the Arizona Territory, where her father was a career soldier. She attended boarding school in the East followed by Radcliffe College (then an annex of Harvard) before marrying Louis Shipman, a playwright attending Harvard, in 1893. The couple moved to Plainfield, New Hampshire, near Cornish the following year and became friends with Charles Platt and his wife Eleanor, as well as other artists living in the area. Inspired by the Cornish gardens, which represented for her "the renaissance of gardening in America, the first effort in this country to return to early traditional gardening," Ellen experimented with gardening on her own. When Louis moved to London c. 1910 (the couple later divorced), Ellen remained in Cornish with their three young children and entered an informal apprenticeship with Platt (Birnbaum and Karson 2000:346–351; Karson 2007:119–126; Way 2009:77–82).

Shipman launched her solo career as a landscape architect by 1912 with projects like the planting plans she created for the Billings family's gardens. She completed a plan for the beds along the lower walk of the Long Terrace in August 1912 and submitted a similar redesign of the plantings in the Flower Garden in 1913. Shipman's complex plan for an 8-ft-wide, 396-ft-long bed on the north side of the Long Terrace walk employed 57 varieties of flowering perennials arranged into six sections defined by predominant color. A parallel 2-ft-wide strip along the south side, adjacent to the hemlock hedge, contained more shade-tolerant perennials. For the Flower Garden, she called for a thorough replanting using most of the original plan, with herbaceous perennials similar to those in the Long Terrace plan and some annuals, as well as eight pyramidal Japanese yews around the center of the garden. She also suggested removing the stone benches and squaring off the adjoining beds; the Billings women never implemented that part of her plan, but historic photographs show they did complete her plantings and maintain them for many years. Elizabeth Billings also hired Shipman to work on a variety of local projects over the next few years, including improvements on the grounds of the Congregational Church (1913) and to the train station property and the triangular park in front of the Elm Street Bridge (1915). The Rockefeller alterations to the terrace gardens removed Shipman's planting design, however, so they no longer retain integrity as examples of her work.

Charles A. Platt's Terrace Gardens

The terrace gardens on the Billings estate were Platt's third-earliest known landscape design (possibly his first outside Cornish) and one of less than a dozen architectural and landscape architecture commissions that he completed before 1900. Despite some alterations to Platt's original design, the Flower Garden and Long Terrace remain important and rare examples of his earliest estate work in the Cornish area that set the precedent for many of his later designs.

Born in New York City to a prosperous corporate lawyer with social connections to the city's most prestigious artists and writers, Charles A. Platt (1861–1933) received exposure to enlightened landscape planning at an early age. He studied drawing at the National Academy of Design and painting at the Art Students League. The printmaker Stephen Parrish (Maxfield's father) encouraged Platt to take up etching, a commercial medium only recently considered suitable to fine art. In 1882, Platt went to Europe, where he alternated winter studio painting study in Paris with summer sketching trips for the next five years. He never received any formal architectural training but learned design primarily through self-study and trial and error. Platt eventually acquired an extensive architectural library that included folios from the Italian and French Renaissance, seventeenth- and eighteenth-century England, and classical ancient works.

Platt first visited the Cornish arts colony in New Hampshire in the summer of 1889 and bought property there the following year, for which he designed a house sited in an orchard with views of the Connecticut

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

River. His earliest architectural and landscape architectural work was for friends and Cornish neighbors, with his first known landscape commission being his 1890 neoclassical design for High Court, the Cornish summer home of the philanthropist Anne Lazarus. In this plan, Platt united the formal framework of the Renaissance gardens he had studied and would soon publish in his 1894 work, *Italian Gardens*, with the old-fashioned planting manner of the Cornish artists, a design that became a hallmark of his work. Platt incorporated formal gardens as middle ground that served in a painterly manner to draw the eye to the view of the surrounding natural landscape of the Connecticut River Valley, with Mount Ascutney as a focal point in the distance. The primary garden space was a classical quincunx garden planted with informal and luxuriant old-fashioned flowers such as larkspur, delphinium, and poppies, loosely contained within their formal beds.

Through the 1890s, Platt focused primarily on his career as a painter and etcher, for which he received medals at the 1893–1894 World's Columbian Exposition. He gathered material for his book while touring the Italian countryside for several months in 1892 with his brother William, an assistant at the firm of Frederick Law Olmsted, Landscape Architect. Platt's work for the Billings family fit his early pattern of designing only for family, friends, and Cornish-area neighbors, prior to his first documented professional landscape commission in 1895, the residence of Dr. John Elliot in Needham, Massachusetts. His other documented architectural and landscape architectural commissions during the 1890s included the Lawrence and Croly houses and gardens in Cornish in 1896; the landscape of the Sprague estate, Faulkner Farm, in Brookline, Massachusetts, in 1897; the house and garden of his brother Jack in Montclair, New Jersey, designed c. 1897; and the Upham residence in Dublin, New Hampshire, designed in 1899.

No plan survives for the Billings' terrace gardens; but photographs, diary references, a receipt for the Italian fountain, and a drawing of the bench at the west end document Platt's involvement with the project. The design of the gardens was visually related to his other early landscape work, especially the quincunx-plan garden on stepped terraces with mountain vistas that he incorporated in both his own place and High Court and his characteristic use of informal, old-fashioned plantings within a neoclassical plan. Platt may have derived the concept for the Long Terrace from the Hedge Walk in the Quirinal Gardens in Rome, which he photographed and painted on his 1892 visit and used as the frontispiece for *Italian Gardens*. He incorporated a similar long terrace in his 1897–1898 design for Faulkner Farm, where he also made use of antique Italian fountains and statues to ornament the garden.

Over the course of the next three decades, Platt exerted a pervasive influence on American landscape architecture from his small office in New York City. He also established a reputation as an influential country house architect, often working in collaboration with other landscape architects such as the Olmsted Brothers, Warren Manning, and Ellen Biddle Shipman. Platt's model for the American house and garden, which featured compartmentalized grounds linked axially to rooms in the house, became a recognized style across the United States. In 1913, he became the subject of one of the first monographs published on the work of a living American architect or landscape architect. Some of his later estate garden plans included Maxwell Court in Rockville, Connecticut (1901–1903); Gwinn near Cleveland, Ohio (1907–1908); the Manor House in Glen Cove, New York (1901–1911); and Villa Turicum in Lake Forest, Illinois (1908–1918). Laura Billings and her husband, Frederick S. Lee, also engaged Platt to design their New York townhouse at 125 East 65th Street (1904–1905) and their country estate on River Road at the eastern end of the Woodstock property (1906–1907). In his later career, Platt produced many institutional designs, including the Freer Gallery in Washington, DC (1913–1923), and campuses at Phillips Academy in Andover, Massachusetts (1922–1930), and the University of Illinois in Urbana (1921–1933) (Birnbaum and Karson 2000:297–300; Karson 2007:47–60).

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

Archeological Potential

The history of archeological research within the District comprises four investigations between 1997 and 2007. The work was undertaken to meet compliance obligations under Section 106 and Section 110 of the National Historic Preservation Act (NHPA) and includes two identification surveys, an archeological resource assessment (ARA), and an archeological overview and assessment (AOA). Subsurface testing included a test pit survey in 1997 around the Stable in advance of its renovation for use as a visitor center; sediment core testing and documentary research for the Woodshed Renovation Project in 2004; and a limited Phase I archeological survey in support of the proposed construction of the building now known as the Forest Center, also conducted in 2004. The scopes of these projects were limited, and no potentially significant archeological resources were identified (Kenny and Crock 2007; Pendery and Griswold 1997).

An AOA of the park inclusive of the Historic (federally owned) and Protection (privately owned) zones was submitted in 2007. This work identified 26 known and 6 potential post-contact archeological sites within the legislated boundaries of the Historic Zone of which 21 have assigned Archeological Sites Management Information System (ASMIS) inventory numbers. The ASMIS-inventoried sites consist of extant buildings and structures associated with the Billings estate, two sugar house ruins, two historic dump sites, the ruins of the McKenzie Farm, and the former location of a Billings estate-era boathouse along the south shore of the Pogue. Documented and potential sites identified in the AOA but not currently inventoried in ASMIS include several landscape features associated with the McKenzie Farm, an unclassified "field structure," outbuildings and yard features associated with the Billings estate, and former residential structures associated with the earlier Marsh occupation of the property. No pre-contact sites have been identified within the district (Kenny and Crock 2007).

A review of park documentation indicates that none of the identified sites have undergone sufficient archeological evaluation to recommend them as "contributing" resources to the district. To be considered a "contributing" resource, a site must 1) have been subject to some level of subsurface archeological investigation and reporting, or must be physically identifiable through a patterning of artifacts, features, or structural remains on the ground surface; 2) contain archeological data that can be defensibly linked to it both temporally and functionally; 3) have a demonstrated ability to address substantive research issues within the identified areas of significance for the district and/or ancillary research issues important to regional pre- and post-contact history; and 4) lie within the district boundaries as delineated in this nomination.

This lack of contributing archeological resources, however, does not preclude the archeological <u>potential</u> of the district under Criterion D to address several issues important to regional pre- and post-contact history. For organizational clarity, this potential is discussed chronologically beginning with the precontact period and progressing through the various historic-period occupations of the property.

Pre-contact and Contact Periods

The district lies in the Vermont Piedmont section of the New England Upland physiographic zone within the Ottauquechee river drainage basin. Little archeological research has been conducted in this drainage that is part of the larger Connecticut River drainage; to date, only two pre-contact sites have been identified in proximity to the district. Site VT-WN-60, located at the head of Quechee Gorge approximately eight miles downstream, sits on a low terrace adjacent to a small tributary and consists of a small campsite with hearth features and a low-density scatter of non-diagnostic lithics. VT-WN-57 is a larger site in the same general location as VT-WN-60 that includes an intact, buried stratum with lithic

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

materials, fire-cracked rock, and a hearth feature radiocarbon-dated to the Late Woodland Period (A.D. 1050–1600) (Hasenstab et al. 1985; Kenny and Crock 2007). Survey work along the Black River drainage basin east of the park has yielded a similar range of sites. These sites include isolated find spots of quartz debitage, a possible rockshelter, small fire pit features, an isolated celt, a possible Archaic period "Ohio flint" projectile point, and several broken chert projectile points (Kenny and Crock 2007; Vermont Division for Historic Preservation site files).

No pre-contact or Contact period archeological sites have been identified within the district, and only two isolated "spot-finds" have been identified in the town of Woodstock. These include a blocked-end tubular pipe found in 1871, identified as typical of the Early Woodland Middlesex burial complex, and a scatter of temporally unaffiliated worked quartz and quartz flakes. Henry Dana, the nineteenth-century historian of Woodstock, states that along the Ottauquechee River in an area located "a short distance below Mr. Billings' present farm-house [ca. 1886]" the land was "occupied some time in the history of this valley as an Indian camping ground" (Dana 1980 [1889]:14). No archeological evidence of this settlement has been identified, and based on Dana's narrative it is unclear whether it was occupied during the pre-contact or Contact periods. Whatever its temporal affiliation, the site to which Dana alludes is located on a level area within the Ottauquechee River Valley near the confluence of Barnard and Kedron brooks, and would have been an attractive location for Native settlement during both periods (Kenny and Crock 2007).

Data from the greater Piedmont-Black River/Connecticut River region, the generally favorable environmental profile of the Marsh-Billings-Rockefeller property, and the presence of at least two precontact sites in proximity to the property suggest a potential for pre-contact resources in the district. The Ottauquechee River is known to have been a major travel route during the Contact Period, connecting the Connecticut River to interior locations. Native Americans crossed the Green Mountains from the Black River headwaters to the upper reaches of the Otter Creek watershed that provided access to the Champlain Valley and beyond. Farther east, the Connecticut River was a primary transportation corridor throughout the pre-contact and Contact periods, and would have provided optimal natural resources for human exploitation and habitation sites.

Terraces, saddles between hills, and areas located adjacent to springs, streams, and other water sources would be most sensitive for pre-contact sites. The area surrounding the Pogue, originally a natural spring and run-off filled wetland, should also be considered particularly sensitive for pre-contact resources. If present, archeological sites within the park would most likely date from the Late Archaic through Late Woodland periods (4000 B.C.– A.D.1600), and could include the remains of temporary hunting camps and way-stations. These sites could provide important information about subsistence patterns as they evolved in response to changing environmental conditions, and provide data about lithic raw material sources that could highlight the scope of potential trade networks in an archeologically under-documented portion of central Vermont (Kenny and Crock 2007:38).

Post-contact Period

Settlement in central Vermont occurred relatively late compared to other portions of New England. The mountainous terrain and steep-sided river valleys presented limited agricultural opportunities that, combined with the remoteness of the region and persistent Native American threats, discouraged movement into the area until the second half of the eighteenth century.

The Town of Woodstock was chartered on July 10, 1761, and the first permanent settlers arrived seven years later. By 1771, the town was home to 42 people living in 10 households (Dana 1980 [1889]:16).

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

Woodstock was officially organized in May 1773, and there was an immediate push to attract families to the town. New farms were cleared, and a sawmill and gristmill were built on Kedron Brook in 1776 (Kenny and Crock 2007; Thompson 1853). Despite these efforts, Woodstock remained a "frontier" community that faced frequent threats of Native American raids. The Royalton raid of 1780, which resulted in the death or capture of 30 people and the destruction of a great deal of property and livestock, was particularly demoralizing, and stalled growth until the final quarter of the eighteenth century (Dana 1980 [1889]).

Following the American Revolution, growth and development in Woodstock increased dramatically. Due to its central location, Woodstock was chosen as the county seat of Windsor County in 1781. By the time that Charles Marsh arrived in 1789 or 1790, the population was 1,597, making Woodstock the second largest town in the county (Arnold 1981). Although its designation as the county seat attracted a number of professionals (e.g., doctors, lawyers), Woodstock's agricultural activities dominated the local economy well into the twentieth century. The valleys, lower hill slopes, and floodplains provided fertile soils that enabled farmers to transition quickly from subsistence to surplus farming that supplied southern New England with a steady stream of wheat, corn, oats, potatoes, beef, potash, pearl ash, and maple sugar (Kenny and Crock 2007; Kerr and Jones 1918:9).

McKenzie and Marsh Occupations (1778-1869)

In 1778–1779, George Thomas settled what would come to be referred to as the McKenzie Farm on a parcel that would eventually encompass 555 acres stretching from Vermont Route 12 to Prosper Road. Thomas, described as "a shrewd and knowing old gentleman as well as a careful and thrifty farmer" (Dana 1980 [1889]:65), is reputed to have built his first house on the west side of Prosper Road (outside the district boundaries) before building a more substantial brick home on the east side of the road (inside the district boundaries); the construction date for this second house is unknown (Kenny and Crock 2007; Wilcke et al. 2000:25).

Following George Thomas' death in 1824, the farm remained within the family and eventually came under the ownership of Joseph C. McKenzie in 1850. Joseph, a member of the extended Thomas family, was considered by his contemporaries to be "an intelligent, progressive agriculturist" (*Vermont Standard* November 16, 1893 4:4) who managed his property in the New England mixed-farming tradition. By 1880, the farm was producing wool, maple sugar, apples, pears, butter, corn, oats, potatoes, buckwheat, hay, beeswax, honey, poultry, wood, and grapes (Kenny and Crock 2007).

McKenzie died of heart failure on his farm on November 4, 1893, and the estate was broken up among several different owners. The farmhouse, associated outbuildings, and about 118 acres east of Prosper Road were sold to the trustees of Frederick Billings, a group that consisted of Franklin and Oliver Billings and Samuel Kilner (Woodstock Land Records [WLR] 33:222). The trustees rented the McKenzie house and woodshed to various tenants from 1894 to 1918 and used the property to keep livestock into the late 1890s (Wilcke et al. 2000:51). Those portions of the property not dedicated to livestock, however, were allowed to return to forest; between 1905 and 1950, several tree plantations were established in areas formerly used as meadows, pasture, sugarbush, and orchards (Wilcke et al. 2000).

The McKenzie house and outbuildings, along with 9.66 acres, were sold to Harold and Lila Turner in August 1918, who then sold the property to Leon E. and Jeanette Gilbert in July 1920. On the afternoon of April 29, 1932, Leon Gilbert "was burning some raspberry canes about 500 feet from the house" when "a sudden wind swept the flames toward the buildings" (*Vermont Journal May* 6, 1932 1:3). The fire

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

completely destroyed the brick house, barn, shed, and garage, and rapidly spread to burn more than 30 acres of surrounding farmland and forest. Later that fall, Gilbert sold the property to Elizabeth Billings of Woodstock and Mary French of Greenwich, Connecticut (WLR 44:158–159; 45:266).

Despite the destruction of the McKenzie Farm (ASMIS #MABI00016.000–16.002) by fire in 1932, visible structural remains survive and provide some information about the layout of the former complex. The main brick house appears to have been arranged with its gable ends perpendicular to Prosper Road with one or two long (probably wood frame) ells extending to the east to connect the house and barn. This layout created a dooryard or workspace south of the house. A large shed partially built into the hillside stood on the south side of the carriage road, and another building, interpreted as a garage, was located west of the shed. This layout suggests that the farm was arranged in the style of the New England connected farmstead, a distinctive building plan in which the main house is connected to the barn through a string of ells that house utilitarian areas such as a kitchen, dairy, woodshed, workshops, laborers' quarters, wagon sheds, or storage space. Such farm complexes, known colloquially as the "big house, little house, back house, barn" arrangement, were common in the nineteenth century and likely developed over time as structures were added or moved within the farmyard. Two additional sites, the documented Sugar House Ruins 2 (ASMIS# MABI00015.000) and the McKenzie Orchard (ASMIS# Unassigned), also are associated with the former farm complex (Hubka 2004; Kenny and Crock 2007:48; Kerr and Jones 1918:10; Lenney 2003:231).

The McKenzie Farm site appears to be largely intact and has the potential to contain minimally disturbed archeological features and deposits from the late eighteenth to early twentieth centuries. Archeological research at the site has the potential to yield information regarding the early settlement of Woodstock, the evolution of the McKenzie farm complex, the organization of domestic space, the types and spatial distribution of activity areas related to agricultural and domestic labor, and refuse disposal patterns. The remains of Sugar House 2 likely date to the mid-nineteenth century and are in excellent condition. That site and the McKenzie Orchard have the potential to provide additional information about the nature and organization of agricultural activities at the farm over time and how those patterns may have changed in response to the farming "improvement" principles that came into fashion in the late nineteenth century.

Known and potential structural remains, in combination with recovered architectural artifacts, also have the potential to shed light on the building sequence at the site and, in particular, whether the complex was constructed as a connected farmstead or whether it evolved to that form over time. Connected farm buildings would not become prevalent in New England until the second half of the nineteenth century, so it is likely that the McKenzie Farm, built by George Thomas sometime between 1779 and 1824, was additive in nature rather than being built "as a piece." The construction of the neighboring Marsh House as a connected farmstead in 1789 (see below), however, suggests that the building template may have come into earlier usage in the Woodstock area and that Thomas had adopted the style long before it became fashionable regionally.

Approximately a decade after George Thomas settled and cleared the lands that would become the McKenzie Farm on the western side of the district, Charles Marsh, Sr. and his wife, Nancy, moved north from Connecticut to settle on its eastern side. Marsh's father, Joseph, was an important man in the Woodstock community and served as the lieutenant governor of Vermont. To help Charles and Nancy become established in the town, Joseph purchased the 50-acre Cady Farm 6 miles upriver from his own property and contracted Samuel Winslow to build the young couple a house c. 1789–1790. In what became the vernacular architectural style of the region, the first Marsh House (ASMIS# Unassigned) was built with a "connected kitchen wing, wagon bay, and barn" extending westward and forming a dooryard

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

to the south (Auwaerter and Curry 2005:Volume II, 66). A kitchen garden was located south of the house across a lane that led from the house to Elm Street, and a woodshed may have been located "on the south side of the hill" (Auwaerter and Curry 2005:Volume II, 66; Dana 1980 [1889]:193; Foulds, Lacy, and Meier 1994:27; Kenny and Crock 2007; Marsh 1895; Presdee & Edwards 1853).

The house was supplied with water piped in from a spring on the hillside to the north. According to Dana, "when Mr. Marsh first bought the Cady farm there was no well on the place. Upon moving into his first house he thought to get his supply of water from a spring [east of the house in the upper meadow], but this did not succeed. He thereupon had water brought to his house by means of pump-logs from a spring on the north side of the hill. . . . This was the first aqueduct laid anywhere in this region" (Dana 1980 [1889]:14).

Charles Marsh, Sr. used this farmstead as his residence for 17 years before building a second, larger brick residence in 1807. After the completion of the new house, which would eventually come to be known as the Marsh-Billings Mansion (ASMIS# MABI00001.000), Marsh rented the old frame house to a series of tenants beginning in 1808 and then sold the house, an associated woodshed, and 0.75 acre to Bushrod W. Rice in 1829. Rice owned the Marsh house for about four years and then sold it in 1833 to the Reverend Benjamin C. C. Parker, who served as rector of St. James Episcopal Church in Woodstock. Parker "made various extensions and additions to the old house, in different directions and in a peculiar style of architecture" apparently with many angles and projections (Dana 1980 [1889]:194). In 1839, Parker resigned as head of his parish and "put up in the rear of his dwelling-house a school-building, in which he opened a 'Female High School' in October of that year for fitting young ladies to become teachers" (Dana 1980 [1889]:194–195, 415–416). The school operated only about a year before closing. The Parkers probably used the house as a rental property between c. 1841 and 1859.

In addition to his various "extensions and additions" to the Marsh House, Benjamin Parker is believed to have constructed the Marsh Tenant House (ASMIS# Unassigned) in 1834–1835. Located a short distance north of the Marsh House, the original use of the building is unclear, but after Parker left Woodstock c. 1841, it is likely that he, and later his widow, used it as a rental property, possibly managed by a local agent. In 1859, Charles Marsh, Jr. purchased the c. 1789 Marsh House, the c. 1835 Marsh Tenant House, their associated outbuildings, and 1.75 acres of land from Benjamin Parker's widow, Frances Parker. Marsh, Jr. likely used the buildings as rental properties until c. 1868/1869, after which the new owner of the larger estate, Frederick Billings, moved the Marsh House and Marsh Tenant House to locations outside of the district boundaries. The former sites of both buildings were heavily disturbed during and after their relocations when Billings blasted and graded over much of the "shelving rock" that stood in front of the Marsh and Tenant houses and completely obscured both sites to construct a croquet (now tennis) court.

Archeological remains associated with the Marsh and Marsh Tenant houses have the potential to provide information on the structures' exact locations, dimensions, construction sequences, and overall integrity. Surviving trash deposits or sheet scatter have the potential to provide information about access to consumer goods and differential consumption patterns between owners and tenants, while yard features such as former gardens, paths, wells, privies, barns, and outbuildings could provide details about landscape organization principles and how those ideas may have differed between owners and tenants over time.

As discussed above, connected farm buildings would not become a common building style in northern New England until the second half of the nineteenth century, but Charles Marsh apparently made use of

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

this innovative plan in his construction of the first Marsh House in 1789. Surviving architectural/structural elements associated with the complex could provide important insights into the earliest iterations of the "big house, little house, back house, barn" form and how that form may have evolved over time in response to changing social and economic conditions. An obvious comparative resource would be the McKenzie Farm to the west, another connected farmstead complex owned by a somewhat less high-profile, but possibly equally architecturally progressive, family.

The Billings and Rockefeller Eras (1869–1954)

The physical development of the district during the Billings and Rockefeller tenures, like that of the Marsh tenure, reflects the pragmatic needs of its owners and their ideas about fashion, function, modernization, social standing, and conservation. George Perkins Marsh's conservation ethos resonated with the Billings and Rockefeller families, and the Billings Estate (ASMIS# MABI00001.000–00013.000) and Mansion Grounds (ASMIS# MABI00001.001) have the potential to contain physical manifestations of their environmental conservation and management philosophies. Known and potential resources consist of footpaths, trails, and carriage roads (ASMIS# MABI00017.000, 00018.000), house gardens and managed tree stands, a dam, and sugar house ruins.

The Pogue, a 14-acre pond/shallow water feature located at the northwest corner of the district, originated as a natural spring and run-off filled wetland that likely was impounded by beavers before European settlement of the area. Historically, the residents of the estate used the Pogue as a source of ice. In the early 1890s, the Pogue Dam (ASMIS# MABI00010.000), a long earth and stone dam, was constructed at the Pogue's outlet resulting in an increased water level and increased size. Pipes were installed to provide water for the lawn and gardens, fire hydrants, and a water pump on the Woodstock Village Green; regular dredging was conducted to maintain its water quality. Archeological investigations around the Pogue have the potential to identify structural and stratigraphic data documenting the use of the feature over time and how those uses reflected the practical, aesthetic, and environmental concerns of the property owners. For example, the variable presence and absence of hydric soil profiles along the extant margins of the Pogue could indicate its former extent and provide clues as to when and if it was impounded for the purposes of ice harvesting, irrigation, and fire control before the Billings era. The identification of the former Boathouse (ASMIS# MABI00019.000) and similar recreation-related structures (e.g., docks and decking and storage outbuildings) could provide data about how early the Pogue was used as a leisure-time resource and how the documented dredging may have been used to ensure water quality not just for environmental purposes but for recreational safety.

There are the ruins of at least two sugar houses within the district boundaries: Sugar House Ruins Number 1 (ASMIS# MABI00015.000) and Sugar House Ruins Number 2 (ASMIS# MABI00016.000). Although the sugar house is an icon of the Vermont landscape today, the building type actually developed relatively late in the history of the industry. Sugar houses were introduced to Vermont c. 1840–1850 and were considered common on the landscape by the 1870s. Before the 1830s, "no sugar-house or shed of any kind was ever thought of" (Jones 1941:11). The construction of sugar houses took off after the introduction of the arch and pan and/or the arch and evaporator, c. 1850s–1880s, that allowed for the relatively efficient reduction of sap into maple sugar and syrup (Visser 1997:177).

As critical to the success of the industry as the evaporator, however, was the availability of abundant sugar maple stands from which to draw sap, a condition that did not emerge until the reforestation of the nearly denuded Vermont landscape in the mid-nineteenth century. While many farms likely maintained sugarbushes throughout, not just after reforestation, larger-scale production was dependent on more

Marsh-Billings-Rockefeller National Historical Park Name of Property Windsor County, VT County and State

expansive stands of mature maples. For this reason, the sugar house ruins within the district boundaries are a symbol of the success of the environmental conservation philosophies espoused by George Perkins Marsh and their visible manifestation in the re-forestation of the Vermont landscape. In addition to their symbolic value, these sites and their associated structural and cultural material profiles could provide insight on how sugar houses were positioned on the landscape relative to farm complexes and sugar maple stands, and how the interior of each sugar house was organized. This information could be compared to statistical data, personal accounts, historical images, contemporary artifacts, and patent records to explore how the district sugarhouses compare to similar resources throughout the state and the growth of maple-sugaring into a state-wide commercial enterprise (Kenny and Crock 2007; Jones 1941).

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Marsh-Billings-Rockefeller National Historical Park Name of Property

Windsor County, VT County and State

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____ preliminary determination of individual listing (36 CFR 67) has been requested ____ X previously listed in the National Register

Marsh-Billings-Rocketeller National Histori Name of Property	cai Park	County and State						
Name of Property		County and State						
previously determined eligibl	e by the National Register							
X designated a National Historic Landmark								
recorded by Historic America								
X recorded by Historic America	n Engineering Record # VT-27	_						
X recorded by Historic American Landscape Survey # VT-1								
Primary location of additional da	ta							
The state of the s	State Historic Preservation Office Other State agency V Federal agency							
X Federal agency								
Local government								
University								
X Other	Form & Mugaum							
Name of repository: Billings	Farm & Museum_							
Historic Resources Survey Numb	er (if assigned): VT 1424-1							
10. Geographical Data								
10. Geographical Data								
Acreage of Property 555								
Use either the UTM system or latit	ude/longitude coordinates							
Latitude/Longitude Coordinates	w							
Datum if other than WGS84:								
(enter coordinates to 6 decimal place	ces)							
A. Latitude: 43.64012	Longitude: -72.55330							
B. Latitude: 43.63965	Longitude: -72.54842							
C. Latitude: 43.64023	Longitude: -72.54625							
D. Latitude: 43.63702	Longitude: -72.53376							
E. Latitude: 43.63588	Longitude: -72.53436							
F. Latitude: 43.63546	Longitude: -72.52611							
G. Latitude: 43.63436	Longitude: -72.52453							
H. Latitude: 43.63533	Longitude: -72.52312							
I. Latitude: 43.63094	Longitude: -72.51689							
J. Latitude: 43.62920	Longitude: -72.52013							
K. Latitude: 43.62955	Longitude: -72.52246							
L. Latitude: 43.62838	Longitude: -72.52313							
M.Latitude: 43.62874	Longitude: -72.52483							
N. Latitude: 43.63239	Longitude: -72.52458							
O. Latitude: 43.63097	Longitude: -72.53415							

Windsor County, VT County and State

P. Latitude: 43.62796	Longitude: -72.53619
Q. Latitude: 43.62898	Longitude: -72.53794
R. Latitude: 43.62872	Longitude: -72.53956
S. Latitude: 43.62675	Longitude: -72.53937
T. Latitude: 43.62853	Longitude: -72.54726
U. Latitude: 43.63045	Longitude: -72.54646
V. Latitude: 43.63331	Longitude: -72.54714
W.Latitude: 43.63444	Longitude: -72.55229
X. Latitude: 43.63390	Longitude: -72.55233
Y. Latitude: 43.63394	Longitude: -72.55410
Z. Latitude: 43.63961	Longitude: -72.55405

Verbal Boundary Description (Describe the boundaries of the property.)

The National Register district boundary is depicted on the attached maps of the district. The boundary begins at a point east of the entrance to the property at I River Street in Woodstock, Vermont, and, proceeding counter-clockwise (east), follows the public right-of-way along River Street and Elm Street/Route 12 for approximately 3,700 ft. The exact boundary between the park and the public right-ofway has not been documented but probably corresponds with the stone wall that runs along the perimeter of the Mansion grounds. At approximately 1,900 ft west of the intersection of River Road, the boundary leaves the public right-of-way along Route 12 and turns south and then west for approximately 3,000 ft along property owned by the Woodstock Resort Corporation (the former Mount Tom downhill ski area). Except for a jog to the north at the west side of the former ski area, the district boundary extends largely due west for approximately one mile until it intersects Prosper Road. It follows the public right-of-way of Prosper Road south for 2,090 ft. The boundary then turns east for 2,000 ft, then south for 1,200 ft along private property, and then another 2,000 ft east along a National Register-listed property owned by the Vermont Land Trust and known as "King Farm." Off the northeast corner of the King Farm, the district boundary jogs around the French Lot and another parcel of private property known as "Togo Hill" adjoining the west slope of Mount Tom for a total distance of approximately 3,100 ft. It extends around the west, north, and east sides of Billings Park (Town of Woodstock) on the North and South Peaks of Mount Tom for a distance of approximately one mile, then borders small residential properties along North Street (including the former gardener's cottage, owned by the Woodstock Resort Corporation) before rejoining the public right-of-way along River Street at the Mansion grounds.

Boundary Justification (Explain why the boundaries were selected.)

The historic district boundary corresponds to the federally owned land within the authorized Marsh-Billings-Rockefeller National Historical Park boundary, also referred to as the Historic Zone. It encompasses the core of the historic Billings estate, excepting the main farm property, which is located within the privately owned Protection Zone of the authorized park boundary.

Windsor County, VT County and State

11. Form Prepared By

name/title: Laura Kline, Architectural Historian; Katie Miller, Architectural Historian;

Stephen Olausen, Sr. Architectural Historian; Kristen Heitert, Sr. Archeologist;

Gretchen Pineo, Asst. Architectural Historian

organization: PAL

street & number: 26 Main Street

city or town: Pawtucket

e-mail: solausen@palinc.com

telephone: <u>401-728-8780</u> date: December 2014

state: RI zip code: 02860

Additional Documentation

Submit the following items with the completed form:

- Maps: A USGS map or equivalent (7.5 or 15 minute series) indicating the property's location.
- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.
- Additional items: (Check with the SHPO, TPO, or FPO for any additional items.)

Photographs

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels (minimum), 3000x2000 preferred, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

Photo Log

Name of Property: Marsh-Billings-Rockefeller National Historical Park

City or Vicinity: Woodstock

County: Windsor State: VT

Windsor County, VT County and State

Photographer: Katie Miller, PAL

Date Photographed: August 28-30, 2013

Description of Photograph(s) and number, include description of view indicating direction of camera:

- 1 of 35. Mansion, facade (east) and south side elevations, looking northwest from lawn.
- 2 of 35. Mansion, interior, front hall staircase, looking northwest.
- 3 of 35. Mansion, interior, basement fallout shelter.
- 4 of 35. Coachman's Cottage, facade (south) elevation, looking north from Stable Drive.
- 5 of 35. Belvedere and Bowling Alley, facade (east) and north side elevations, looking southwest from Belvedere Drive.
- 6 of 35. Greenhouse, south elevation, and Swimming Pool, looking northwest from Pool Terrace; Cutting Garden and Putting Green adjacent to Greenhouse.
- 7 of 35. Garden Workshop, north and west elevations, looking southeast from Belvedere Drive.
- 8 of 35. Bowling Alley, interior, looking northwest.
- 9 of 35. Stable, facade (south) elevation, looking northeast from Stable Drive; Hitching Post to left of entrance.
- 10 of 35. Garage, facade (east) elevation, looking northwest from Stable Drive.
- 11 of 35. Bungalow, facade (north) and east side elevations, looking southwest from edge of Bungalow Clearing.
- 12 of 35. Horse Shed, east and north elevations, looking southwest from Upper Meadow Through-Road through Upper Meadow Corral Fence.
- 13 of 35. Mansion Garage, south and east elevations, looking northwest from Belvedere Drive; Mansion Parking Area, Stone Wall, and Roadside Lamppost visible at right.
- 14 of 35. Perimeter Stone Wall, looking southwest along Elm Street from main entrance.

Windsor County, VT County and State

- 15 of 35. Main Entrance Drive, looking northwest from entrance; gatepost lanterns on Main Entrance Gateway visible above hedges on either side of drive.
- 16 of 35. Lower Summer House, south elevation, and Perimeter Stone Wall, looking north from River Street.
- 17 of 35. Upper Summer House, south and east elevations, and Upper Summer House Stone Wall, looking northwest from edge of Summer Houses Path.
- 18 of 35. Reservoir, east and north elevations, looking southwest from Upper Hillside Path.
- 19 of 35. Woodshed, south and east elevations, and Woodshed Yard Retaining Wall, looking northwest from Pogue Carriage Drive.
- 20 of 35. Tennis Court, looking northeast from swale.
- 21 of 35. Pogue Carriage Drive (left) and Summer Pasture Loop (right), looking west from Y-intersection; Stone Water Trough 1 at center.
- 22 of 35. Belvedere Drive and Retaining Wall, looking east from loop at Garden Workshop.
- 23 of 35. Carriage Drive Culvert.
- 24 of 35. Mount Tom Stone Walls.
- 25 of 35. Mansion Terrace Designed Landscape, view from Mansion lawn, looking east across intervale toward Mount Peg.
- 26 of 35. Flower Garden, looking east from Pool Terrace; Italian Fountain at center.
- 27 of 35. Long Terrace, looking west across upper terrace from east end, toward Bench and Steps at west end.
- 28 of 35. Pool Terrace, looking west from lawn toward Belvedere with Pool Terrace Steps and Rock Gardens in foreground; Sundial Base at center.
- 29 of 35. Fernery, looking northwest from Fernery Path across part of Watercourse.
- 30 of 35. Lily Pond Garden, looking southeast from Upper Bridge down Waterfall Path to Lower Bridge and Pond.
- 31 of 35. Pogue and Mount Tom Forest, looking north across pond from southeast corner of Pogue Loop.

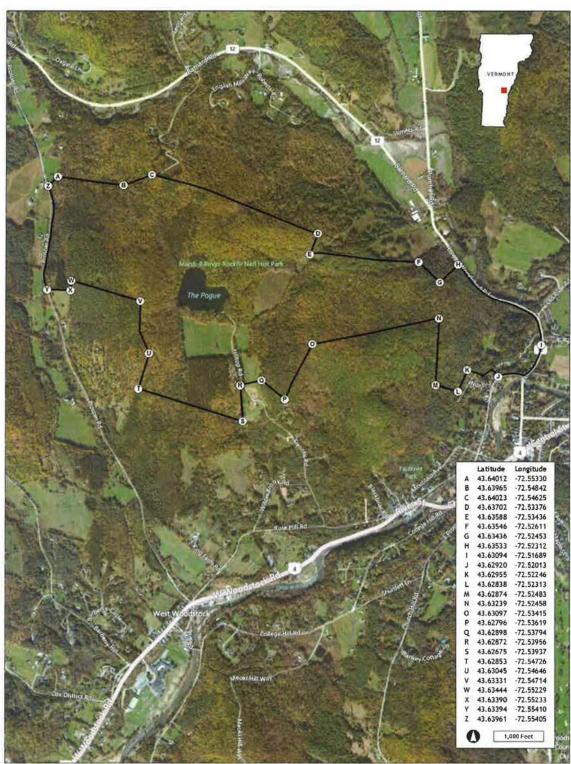
Marsh-Billings-Rockefeller National Historical Park Name of Property

Windsor County, VT County and State

- 32 of 35. Elm Lot and Mount Tom Forest, looking south across field from Pogue Loop.
- 33 of 35. Mount Tom Forest: mixed plantation, looking northeast from intersection of McKenzie Road and North Ridge Loop.
- 34 of 35. Mount Tom Forest: mixed plantation, looking northwest from north section of North Ridge Loop.
- 35 of 35. Non-contributing Forest Center, west and south elevations, looking northeast from Woodshed Yard.

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seg.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 100 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Office of Planning and Performance Management. U.S. Dept. of the Interior, 1849 C. Street, NW, Washington, DC.



Marsh-Billings-Rockefeller National Historical Park National Register District Coordinate Map

Windsor County, VT County and State

Additional Photographs



French Lot and Mount Tom Forest, looking south toward Mount Ascutney from Summit Road (photo courtesy NPS).

Windsor County, VT County and State

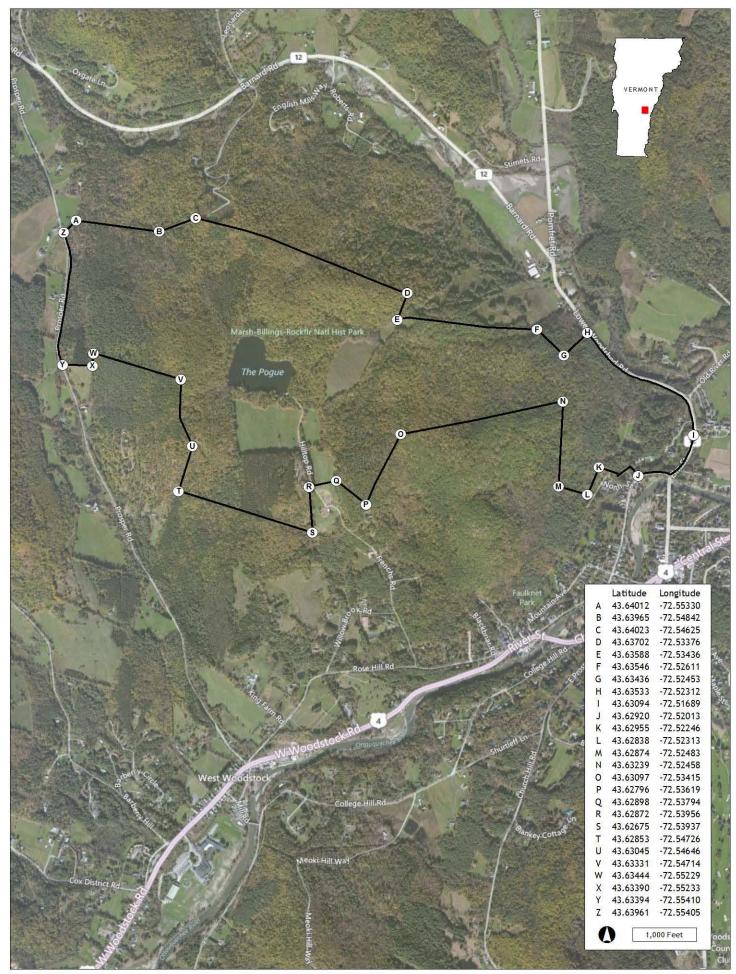


Mount Tom Forest: wolf tree in 1952 red pine plantation (photo credit Harriet Wise, courtesy NPS).

Windsor County, VT County and State



Mount Tom Forest: hardwood stand (photo credit Emily Sloan, courtesy NPS).



Marsh-Billings-Rockefeller National Historical Park National Register District Coordinate Map

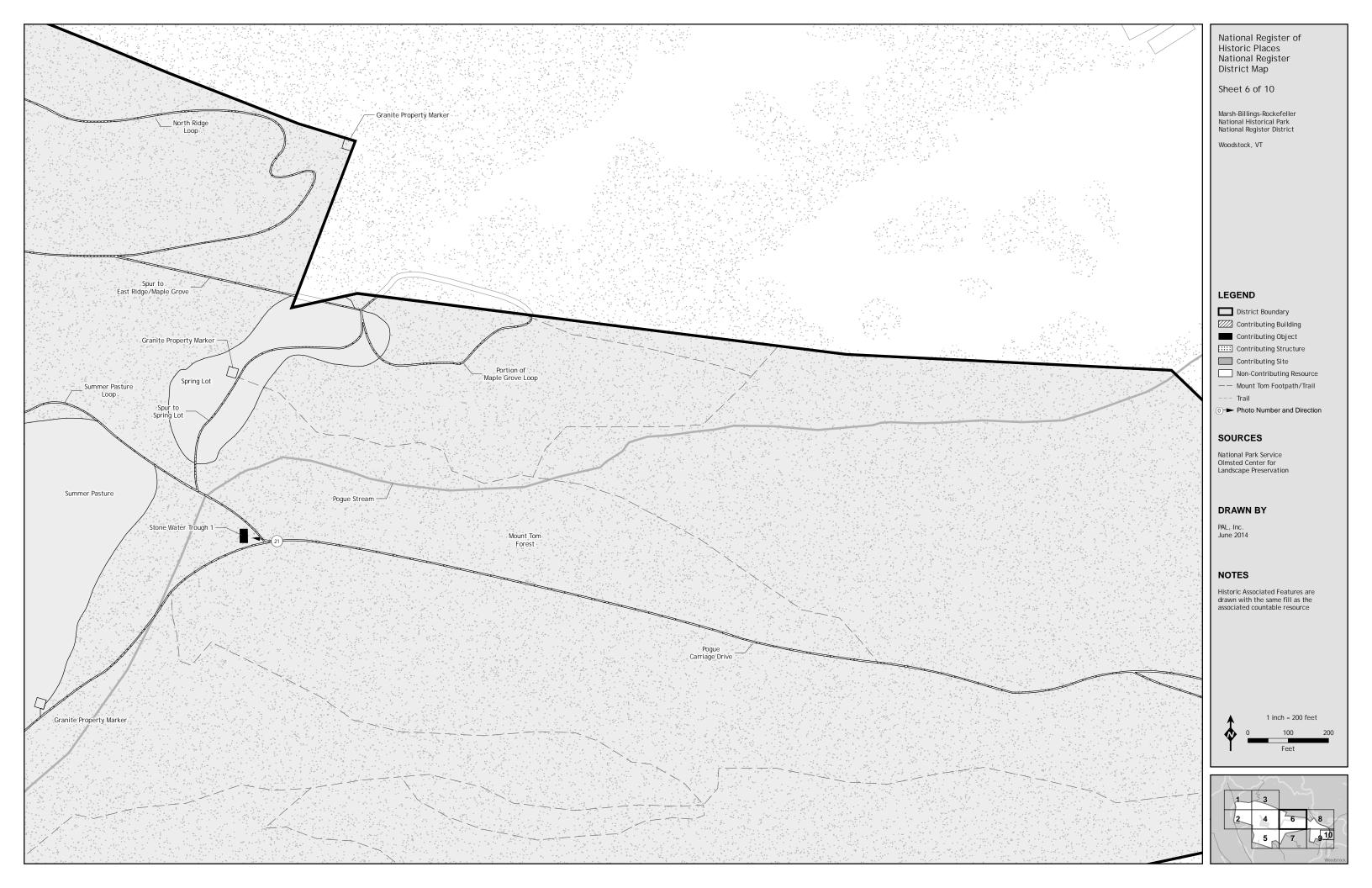




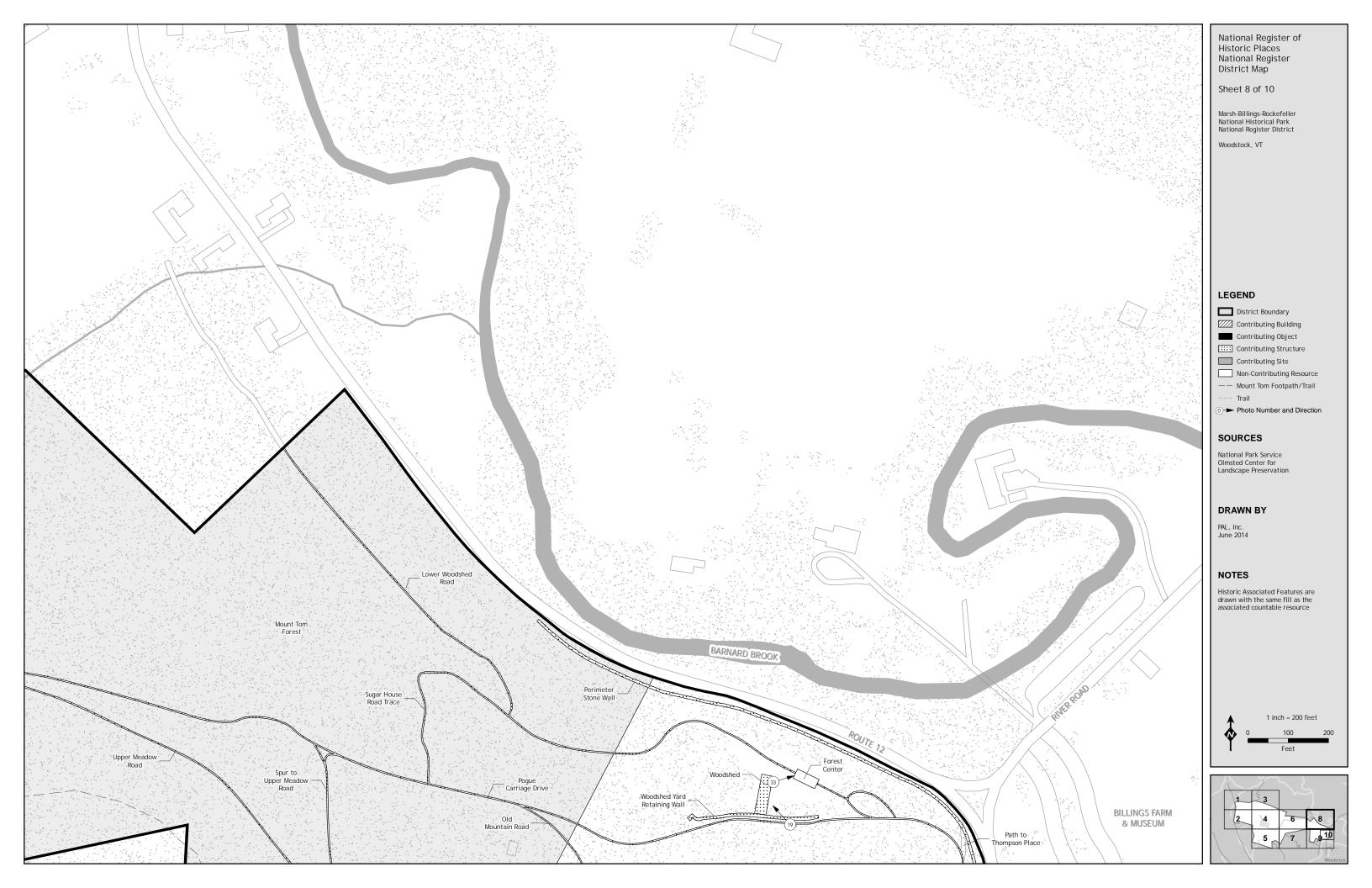


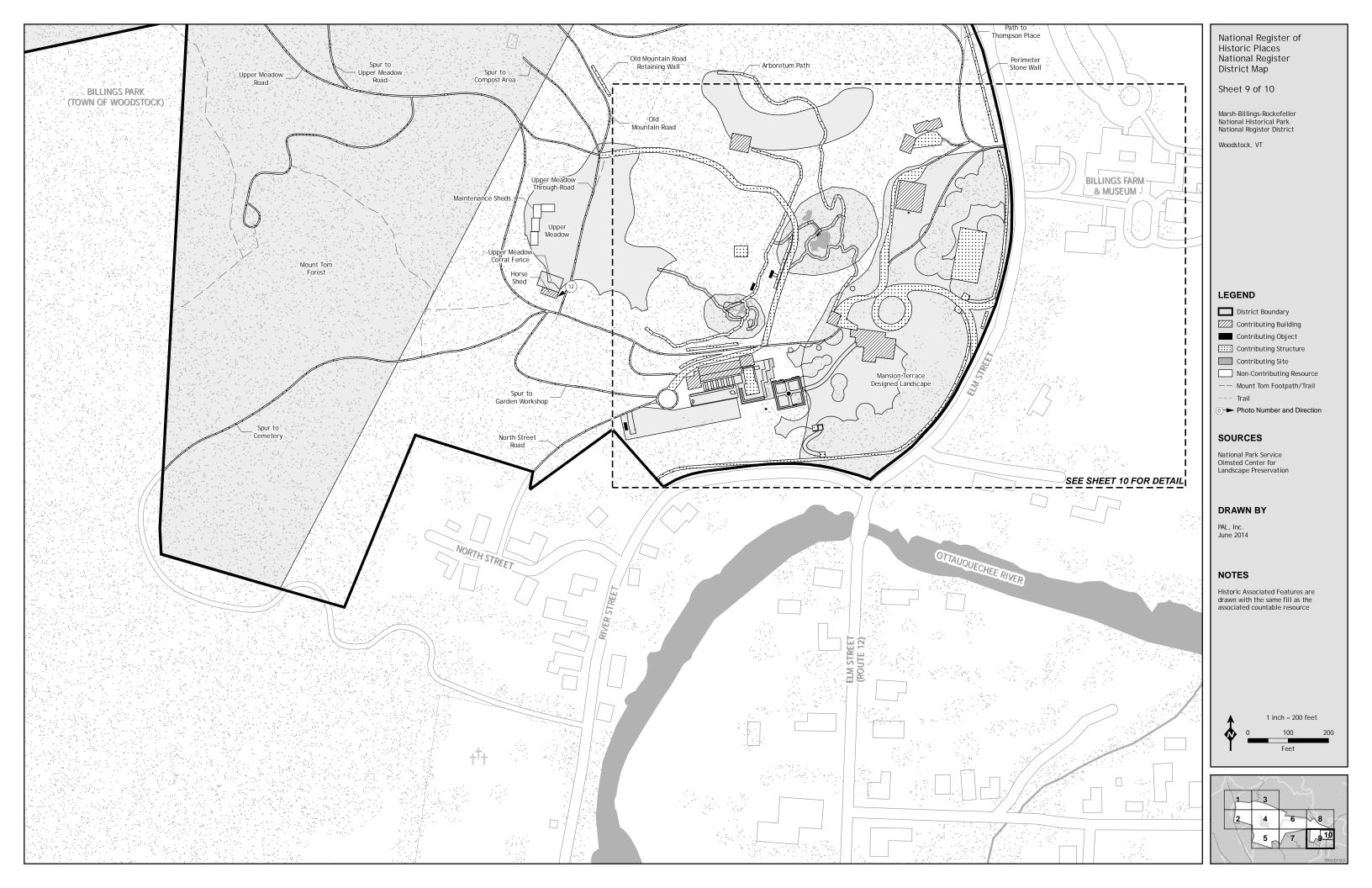


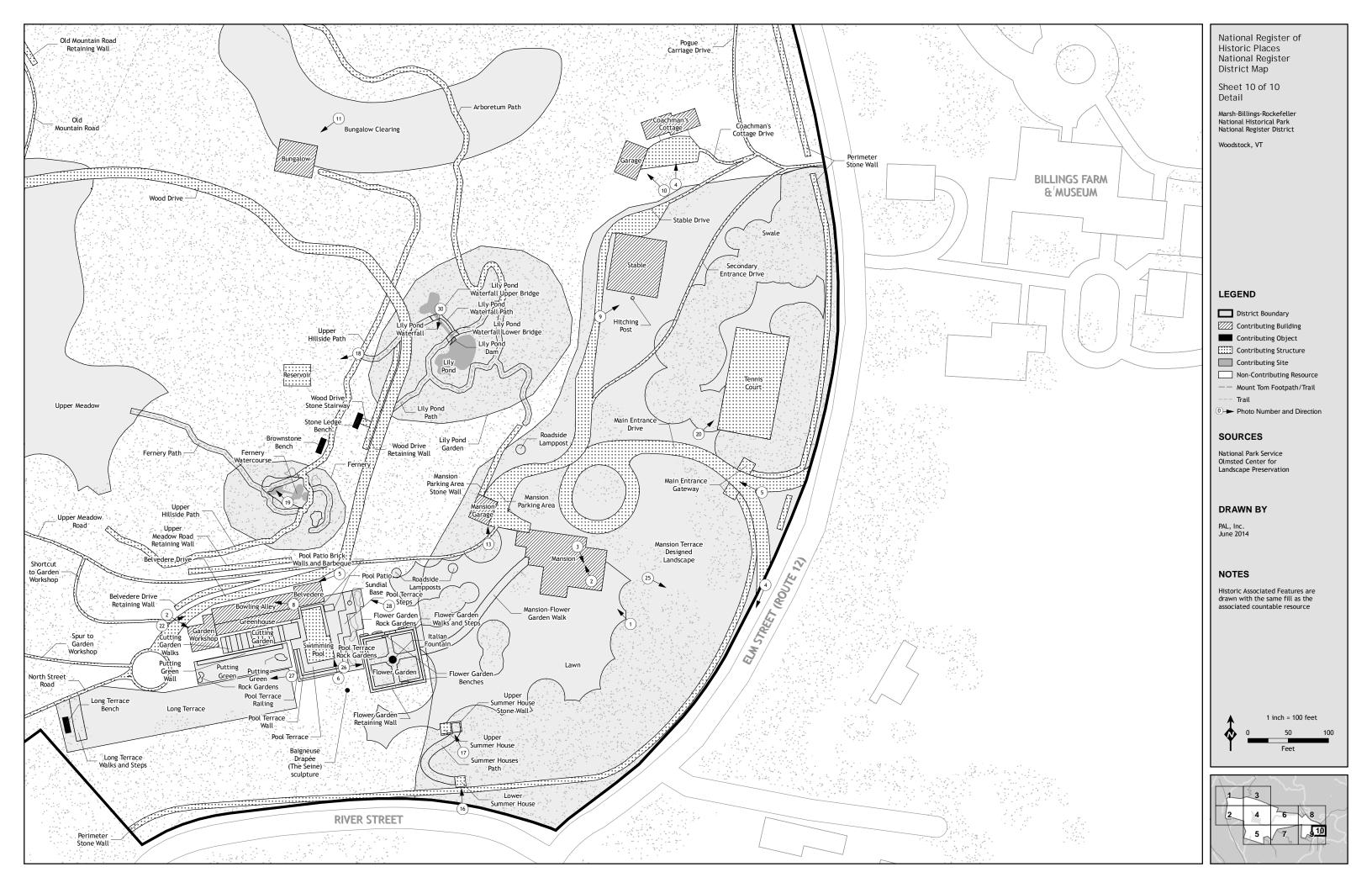














Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 1 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 2 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 3 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 4 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 5 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 6 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 7 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 8 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 9 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 10 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 11 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 12 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 13 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 14 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 15 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 16 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 17 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 18 of 35



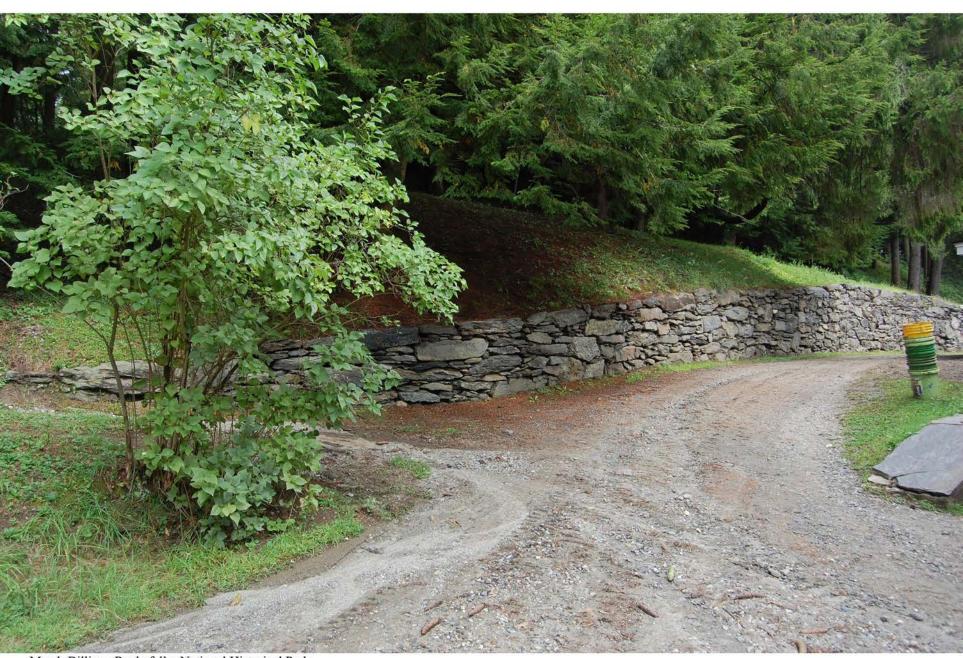
Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 19 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 20 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 21 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 22 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 23 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 24 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 25 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 26 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 27 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 28 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 29 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 30 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 31 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 32 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 33 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 34 of 35



Marsh-Billings-Rockefeller National Historical Park Windsor Co., VT Photo 35 of 35

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION		(6)	
PROPERTY MarshBillingsRocke NAME:	feller Na	tional Histori	cal Park
MULTIPLE Agricultural Resources NAME:	of Vermon	nt MPS	
STATE & COUNTY: VERMONT, Windsor			
DATE RECEIVED: 7/01/16 DATE OF 16TH DAY: 8/10/16 DATE OF WEEKLY LIST:		PENDING LIST: 45TH DAY:	7/26/16 8/16/16
REFERENCE NUMBER: 16000526			
REASONS FOR REVIEW:			
APPEAL: N DATA PROBLEM: N LAND OTHER: N PDIL: N PERI REQUEST: N SAMPLE: N SLR	OD: N	PROGRAM UNAPP	
COMMENT WAIVER: N ACCEPT RETURN REJE	CT 8-15	ZOIG DATE	
ABSTRACT/SUMMARY COMMENTS: District rungs sent 8/15			
RECOM. / CRITERIA Accept ABLC			
REVIEWER J. Golden	DISCIPLIN	E	
TELEDIONE	האתב		

If a nomination is returned to the nominating authority, the nomination is no longer under consideration by the NPS.

DOCUMENTATION see attached comments Y/W see attached SLR Y/W/



IN REPLY REFER TO: 1.A.2. (NER-RSS)

United States Department of the Interior

NATIONAL PARK SERVICE Northeast Region United States Custom House 200 Chestnut Street Philadelphia, PA 19106

MAY 0 6 2016

Memorandum

To:

Federal Preservation Officer (WASO)

From:

Associate Regional Director, Resource Stewardship and Science

Subject:

National Register Documentation for Marsh-Billings-Rockefeller National Historical

Park

We are forwarding, for your approval, National Register of Historic Places (NRHP) documentation for Marsh-Billings-Rockefeller National Historical Park (NHP), located in the town of Woodstock, Windsor County, Vermont.

Marsh-Billings NHP was established on August 26, 1992, (Public Law 102-350) to interpret the history of conservation stewardship in America, as well as the contributions of George Perkins Marsh, Frederick and Julia Billings, Mary Billings French, Mary French Rockefeller and Laurance Spelman Rockefeller to the conservation and land stewardship movement. On October 21, 1998, Congress amended Public Law 102-350 to change the name of the park from Marsh-Billings NHP to Marsh-Billings-Rockefeller NHP.

The 643 acres within the authorized boundary of the NHP encompasses the core of the historic Billings estate. The legislation identifies two distinct zones within the authorized boundary of the Historic Zone, which corresponds to the 555 federally owned acres operated by the National Park Service and comprises the Mansion, Grounds and Mount Tom Forest; and the adjacent Protection Zone, which corresponds to the 88 privately owned acres on the east side of Elm Street, across from the Mansion, operated by the Woodstock Foundation, Inc. as Billings Farm & Museum. This National Register documentation includes only the Historic Zone and not the Protection Zone.

This documentation was prepared by the Public Archeology Lab, Inc. project team: Laura Kline, Architectural Historian; Katie Miller, Architectural Historian; Stephen Olausen, Sr. Architectural Historian; Kristen Heitert, Sr. Archeologist Gretchen Pineo, Asst. Architectural Historian. The document was reviewed by the regional cultural resource staff and the region's former National Register coordinator, Elizabeth Igleheart. This documentation was reviewed and approved by the Vermont State Historic Preservation Office. Superintendent, Rick Kendall approved this documentation.

If you have any questions please contact Bethany Serafine, National Park Service, History Program, 54 Elm St., Woodstock, VT 05091. Bethany Serafine@nps.gov, 802-457-3368 ext. 250.

Attachments



United States Department of the Interior

NATIONAL PARK SERVICE 1849 C Street, N.W. Washington, DC 20240

RECEIVED 2280

JUL - 1 2016

Nat. Register of Historic Places National Park Service

June 28, 2016

Memorandum

To:

Acting Keeper of the National Register of Historic Places

From:

Federal Preservation Officer, National Park Service for Fall

Subject:

National Register Nomination for Marsh-Billings-Rockefeller National

Historical Park, Windsor County, VT

I am forwarding the National Register nomination for the Marsh-Billings-Rockefeller National Historical Park, located in Windsor County, VT. Although the park was administratively listed in the National Register with its establishment in 1992, this is the first park-wide documentation produced for the property. The Park History Program has reviewed the nomination and found the property eligible at the local level of significance under Criteria A, B, and C with areas of significance of Agriculture, Architecture, Conservation, Engineering, Landscape Architecture, and Social History. If you have any questions, please contact Kelly Spradley-Kurowski at 202-354-2266, or kelly spradley-kurowski@nps.gov.