

704

United States Department of the Interior  
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 *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. 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, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name: E. L. Smith Roundhouse Granite Shed

other names/site number: \_\_\_\_\_

2. Location

street & number: 23 Burnham Meadows not for publication n/a

city or town: Barre vicinity: n/a

state: Vermont code: VT county: Washington code: 023 zip code: 05641

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this x nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property x meets \_\_\_\_\_ does not meet the National Register Criteria. I recommend that this property be considered significant \_\_\_\_\_ nationally x statewide \_\_\_\_\_ locally. (See continuation sheet for additional comments.)

Signature of certifying official

Date

State or Federal Agency or Tribal government

In my opinion, the property \_\_\_\_\_ meets \_\_\_\_\_ does not meet the National Register criteria. (See continuation sheet for additional comments.)

Signature of commenting official or other official and title

Date

State or Federal agency and bureau

#### 4. National Park Service Certification

I, hereby certify that this property is:  
☒ entered in the National Register  
     See continuation sheet.  
☐ determined eligible for the National Register  
     See continuation sheet.  
☐ determined not eligible for the National Register  
☐ removed from the National Register  
☐ other (explain): \_\_\_\_\_

Signature of the Keeper

*Isa Doline*

Date of Action

9/26/11

#### 5. Classification

**Ownership of Property:** (Check as many boxes as apply)

- ☒ private  
☐ public-local  
☐ public-state  
☐ public-Federal

**Number of Resources Within Property:**

	Contributing	Noncontributing
buildings:	3	
districts:		
sites:		
structures:		
objects:		
total:	3	0

**Category of Property:** (Check only one box)

- ☒ building(s)  
☐ district  
☐ site(s)  
☐ structure(s)  
☐ object(s)

**Number of Contributing Resources Previously Listed in the National Register:** 0

**Name of Related Multiple Property Listing:** n/a  
 (Enter "N/A" if property is not part of a multiple property listing.)

#### 6. Function or Use

**Historic Functions:** (Enter categories and subcategories from instructions)

Category:	Subcategory:
INDUSTRY/PROCESSING	Manufacturing Facility

**Current Functions:** (Enter categories and subcategories from instructions)

Category:	Subcategory:
INDUSTRY/PROCESSING	Manufacturing Facility

## 7. Description

### Architectural Classification: (Enter categories from instructions)

Italianate

other: Roundhouse Granite Shed

### Materials: (Enter categories from instructions)

foundation: CONCRETE

roof: METAL: Steel

walls: WOOD: Weatherboard

METAL: Iron

other: \_\_\_\_\_

### Narrative Description: (Describe the historic and current condition of the property on one or more continuation sheets.)

See continuation sheet.

## 8. Statement of Significance

### Applicable National Register Criteria:

(Mark "X" in one or more boxes for the criteria qualifying the property for National Register listing)

- ☒ A. Property is associated with events that have made a significant contribution to the broad patterns of our history.  
☐ B. Property is associated with the lives of persons significant in our past.  
☒ 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.

### Criteria Considerations:

(Mark "X" 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 a grave.  
☐ D. A cemetery.  
☐ E. A reconstructed building, object, or structure.  
☐ F. A commemorative property.  
☐ G. Less than 50 years of age or achieved significance with the past 50 years.

### Areas of Significance: (Enter categories from instructions)

INDUSTRY

ARCHITECTURE

### Period of Significance:

1889-1955

1889-1900

### Significant Person: (Complete if Criterion B is marked above) Significant Dates:

### Cultural Affiliation:

n/a

### Architect / Builder:

n/a

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section 7 Page 1

E.L. Smith Roundhouse Granite Shed  
**Name of Property**

Barre, Washington County, Vermont  
**County and State**

---

**Building Description**

Built in 1889, the E.L. Smith Roundhouse Granite Cutting Shed is a sixteen-sided industrial style building. The shed is located in an industrial complex, just south of the Stevens Branch River, which used to house many other granite cutting businesses such as: Santini, Revilla, Comolli, and Grearson Granite Companies.<sup>1</sup> Presently the complex is still home to granite sheds and other industrial businesses. P&G Custom Sandblast and Family Memorials are neighbors to Hardrock Granite, which currently occupies the E.L. Smith Roundhouse Shed. The terrain of the complex is fairly level and is located just south of Barre's historic and current downtown center. The shed meets most the requirements for the seven areas of significance, which are: location, design, setting, materials, workmanship, feeling and association. It is only weaker in the design and materials categories as the footprint has changed and some original materials have been lost.

**1. Roundhouse Granite Shed, 1889, contributing  
Exterior**

The shed stands two stories high, and each of the sixteen sides historically contained four window openings, two on the first floor and two on the second story. The shed caught fire in 1968 thus altering the exterior character of the building.<sup>2</sup> Currently only eight of the original window openings remain and, among those are seven nine-paned casement windows and one of modern design. The nine-paned casement windows are not original and may have been installed after the fire.<sup>3</sup> The shed is timber-framed with post and beam construction techniques. Also due to the fire, the original siding was lost and it was resided with vertical clapboards. The sixteen-sided conical-shaped hipped roof has facets ranging from 11 ft 6 in to 14 ft 4 in, clad in aluminum. The foundation where present is concrete. The shed mainly stands on the ground and there is some evidence of an old stacked stone foundation; on the inside the walls have been reinforced with concrete supports. The additional buildings stand on concrete foundations. Originally the shed contained a sixteen-sided cupola that was also lost in the 1968 fire. While many of

---

<sup>1</sup> 1925 Sanborn Insurance Map, Barre, VT

<sup>2</sup> Holly K. Chamberlain, HAER, March 17, 1987

<sup>3</sup> John Belding's turn of the century photo depicts larger window openings that are fifteen-paned.

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section 7 Page 2

E.L. Smith Roundhouse Granite Shed  
Name of Property

Barre, Washington County, Vermont  
County and State

the exterior features have been altered, the original massing and interior framing are still visible, and represent a rare form of this type of industrial structure. The exterior of the shed has lost some of its integrity due to the loss of original construction materials, but this often occurs with industrial buildings. The original massing is intact and that retains its structural integrity. The interior of the shed retains good integrity as most of the original post and beam framing is intact as well as the nineteenth century crane that is still in use.

**Interior**

The interior of the shed retains the most of its historic material. Almost all of the timber framing remains, although two beams on the southern side of the shed have been replaced with iron I-beams because the wooden beams were severely damaged in the fire and were structurally unsound. Four rafters in each of the sixteen divisions support the conical roof. An interior concrete foundation has been added for extra stability, but is not visible from the outside. The two stories are completely open and in the middle of the shed is a crane designed to move the granite to various locations around the shed. The design of the shed and the crane make it possible for granite to be moved to any location inside its circular design. There is also an upside-down, cone-shaped, insulating structure situated around the top of crane that helps keep warm air from collecting in the pinnacle of the roof. This is not connected to the building and can easily be removed. The crane operates from a central location; the jib runs horizontally and is connected to a track on the second story. When the central crane shaft rotates it allows the jib to revolve around the entirety of the shed. Located on top of the jib is another small rail system that supports a small cart that is connected to the hoist. The cart is able to move back and forth along the crane. The movement of the jib and the cart and hoist allows the operator to move a piece of granite to any location in the shed. Over the years, the cart and hoists have been replaced, but the overall structure and framing of the crane is original and intact.

**2. Northern Addition, circa 1940, contributing**

**Exterior**

In the 1940s several additions were made to the Roundhouse Shed, one on the southern elevation and one on the northern elevation. The largest addition on the northern



**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section 7 Page 3

E.L. Smith Roundhouse Granite Shed  
Name of Property

Barre, Washington County, Vermont  
County and State

elevation is two stories tall three bays wide and six bays deep; the main massing of the addition is capped by a gabled corrugated metal roof. The addition is clad in asphalt siding, which is deteriorating. The addition stands on a concrete foundation. Originally, the Italianate office (contributing building #3) was adjacent to the shed on the northern elevation; it was moved farther north in the 1940s to accommodate the largest part of the addition, which creates more space for the business. On the western elevation of the addition is a one story three-bay long by one-bay wide garage-entrance. While this addition changed the building's footprint the roundhouse shed's original massing remains intact, as no alterations were made to the shed when the addition was added. Access between the shed and the addition is through the original garage door as depicted in the John Belding historic photograph.

**Interior**

The large northern addition connecting the shed and office is also open with no floor divisions, it is steel framed, and contains all the granite company's cutting tools. The building encompasses five sides of the roundhouse shed on the northern elevations. No alternations were made to the shed, as the two-story addition was constructed in front of the original door opening. There are remnants of insulation on the ceiling, but much of it was lost in the 1968 fire. The roundhouse shed is used for shaping, storage, and shipping.

**2a. Southern Addition, circa 1940, contributing**

**Exterior**

In the 1940s a one-story addition was added on the southern elevation of the shed encompassing five sides of the shed. This addition was built at the same time as the northern 1940s additions and the building materials are the same. The addition is four bays wide and one bay deep; two of the bays on the westerly side are capped by a gabled roof and the other two bays by a shed roof. The addition is clad in asphalt siding, which is deteriorating, is capped by a galvanized corrugated metal roof, which is in good condition, and stands on a concrete foundation. A garage door was also added next to this one-story addition and is the only major alteration to the structure of the shed. The date of this door is unknown; however it was present in the early 1970s when Paul Savard operated his granite cutting business.

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section 7 Page 4

E.L. Smith Roundhouse Granite Shed  
Name of Property

Barre, Washington County, Vermont  
County and State

---

**3. Office, 1889, contributing**

**Exterior**

The last building in the complex is the Italianate office, built by E.L. Smith at the same time the roundhouse shed was constructed and then moved north to make room for the 1940s northern two-story addition (contributing building #2). It is a three-bay by three-bay building with the door opening in the center bay. The doorway is capped by a simple pediment portico, which has changed over the years. In the historic photographs, the portico is flat-roofed, and covers the doorway and the front two windows. The current office's portico is only over the doorway and has turned Queen Anne porch posts. The windows are two-over-two double-hung sash with molded cornice caps. The building now stands on a concrete foundation, which was most likely added when the building was moved. It is clad in wooden clapboard and topped by a flat roof with a wide projecting cornice.

**Interior**

The interior of the office has been remodeled many times. The window openings are historic, but the rest of the interior has been altered. The design of this building has probably changed the most over the years, especially to the interior; however, as with the shed, the original massing remains.

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section 8 Page 1

E.L. Smith Roundhouse Granite Shed  
Name of Property

Barre, Washington County, Vermont  
County and State

---

**Significance**

The E.L. Smith Roundhouse Granite Shed in Barre, Vermont, built in 1889, is the only example of a round, sixteen-sided granite cutting shed known in the United States.<sup>1</sup> The shed is a timber-framed industrial building that has been enlarged throughout the years; even with the additional buildings and elevations the original shape is readable. Also, a small office was built with the shed.<sup>2</sup> The office is still standing, but has been moved to expand the shed's cutting space. Since its construction the cutting shed has retained its original purpose, despite changing hands ten times, and is currently owned by Fred Craige of Hardrock Granite, Co. It still houses the crane built by E.L. Smith & Company, and although parts have been replaced the overall timber-framed structure is intact.<sup>3</sup> This building meets National Register Criteria A, because of its significance in the granite history in Barre, Vermont. Emery L. Smith, for whom the shed is named, was a quarry owner and innovator in the granite industry, experimenting with different designs and technologies. The granite industry was Barre's largest industrial activity during the building's period of significance. It also meets Criteria C as a rare example of a Roundhouse Granite Shed.

Barre, Vermont was first settled in 1788 on the Winooski River by families from New Hampshire, Massachusetts and Rhode Island. Then the town was known as Wildersburgh. In 1793, the town voted to change the name because Wildersburgh sounded unwelcoming. Local folklore states that the name change was decided between a fistfight between Jonathan Sherman of Barre, Massachusetts and Joseph Thompson of Holden, Massachusetts. Sherman won and named the town after his hometown in Massachusetts.<sup>4</sup> The first settlers were farmers and consider the granite a nuisance--they had no idea what wealth lay below them.<sup>5</sup>

---

<sup>1</sup> Holly K. Chamberlain, HAER, March 17, 1987

<sup>2</sup> John Belding, photographer. Turn of the 20<sup>th</sup> Century image of the roundhouse shed and office. The Glass plate was bought for the Aldrich Public Library with a grant from the Vermont Historical Society.

<sup>3</sup> Warranty Deed. Hardrock Granite, Co.

<sup>4</sup> Rod Clarke. *Carved in Stone: A History of the Barre Granite Industry*. (Barre, VT: North Light Studio, 1989) 7-8

<sup>5</sup> Todd Parker. *The Story of the Rock of Ages*. (Montpelier: Boutwell, Milne and Varum, 1925), 13



**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section 8 Page 2

E.L. Smith Roundhouse Granite Shed  
Name of Property

Barre, Washington County, Vermont  
County and State

In 1814 Robert Parker opened the first granite quarry on Cobble Hill. Barre's granite comes from two locations on hills located outside the city center, Millstone Hill and Cobble Hill. Millstone received its name because the first stones removed from the hill were used as shaping stones in local mills. Cobble Hill is named because the stones from this mound were used mainly to pave cobble stone streets.<sup>6</sup> In 1834 Elephalet Hewitt and Robert Parker opened Barre's first granite cutting shed, under the name Hewitt and Parker, Co. Hewitt was the son-in-law of Parker. Their business was situated two miles southeast of the Barre lower village. They also owned quarries located in Marshfield, where the granite was known for its beautiful dark color. Hewitt and Parker advertised hewn and rough cut granite and were known to be able to supply on short notice. They conducted business in underpinning, which means to replace or strengthen foundations, and supplied doorsteps, sills, windows, hearths, mantels, tombstones, and oil millstones.<sup>7</sup> Throughout the early part of the nineteenth century Hewitt and Parker enjoyed a steady and comfortable business.

Until 1889 the Barre quarrying and granite manufacturing business experienced slow growth. Granite is tremendously heavy and transport was arduous. Also, with the quarries located on steep hills outside the city center it was extremely difficult to transport the granite from the quarries to the cutting sheds located in downtown Barre. It was not until the completion of the Barre Railroad, 38 years after the Central Vermont Railroad [CVR] bypassed the city that the granite-industry boom could occur.<sup>8</sup> Montpelier and Barre were left off the main route of the CVR due to the influence of Charles Paine, the railroad's first president and former governor of Vermont. Paine wanted the railroad to run through his hometown of Northfield, Vermont, because of his real estate holdings and possibility of economic growth with the coming of the railroad.<sup>9</sup>

<sup>6</sup> Clarke, 8

<sup>7</sup> Parker, 11-15

<sup>8</sup> Bill Gove. *The Sky Route to the Quarries: History of the Barre Railroad*. (St. Johnsbury, VT: Quarry View, 2004) 1

<sup>9</sup> Edward Hungerford et al. *Vermont Central/Central Vermont: A Study in Human Effort*. (Boston: The Railway and Locomotive Historical Society, 1942) 11

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section 8 Page 3

E.L. Smith Roundhouse Granite Shed  
Name of Property

Barre, Washington County, Vermont  
County and State

In 1875, the CVR added a line to Barre, but that only connected the downtown with the rest of the railroad. Barre still needed a rail line to connect the quarries with the granite cutting sheds.<sup>10</sup>

On January 16, 1888 E.L. Smith presided over a town meeting held at the Barre Opera House, which decided that the Montpelier and Wells River Railroad, the Central Vermont Railroad rival, would build a line connecting the quarries to downtown Barre. The Barre Railroad Company was formed, along with a board of directors, which included Smith. The CVR filed multiple injunctions trying to stop the proceedings of the newly formed Barre Railroad Co. and the Montpelier and Wells River Railroad. The CVR enjoyed small victories, but ultimately lost the battle and a rail line, which later became known as the "Sky Route," was finally opened and operating by 1889.<sup>11</sup>

Before the railroad Hewitt and Parker enjoyed a small business and only five other cutting firms existed.<sup>12</sup> Barre was extremely rich in granite, but the problem was transport. After the railroad line was built the number of granite cutting firms rose to over 100, drilling from over 35 different quarries. The population between 1880 and 1890 grew from 2,060 to 6,790, more than tripling in size.<sup>13</sup> During the period of the granite boom, the industry was the main employer for the city. Barre quickly became the major producer of granite in the state of Vermont, and that continued until the middle of the twentieth century.

Now that the railroads were in place, the granite industry grew with tremendous fervor. The availability of new jobs attracted granite workers from all over the world. The first immigrants were from Scotland, many from Aberdeen. The Scottish saw Barre as a new

<sup>10</sup> Gove, 1-10

<sup>11</sup> Gove, 8-13

<sup>12</sup> Gove, 22-23

<sup>13</sup> The Montpelier, Barre, Waterbury and Northfield City Directory. (Glen Falls, NY: The National Directory, 1880)

Barre City Directory. (Newburgh, NY: LP Waite, 1890)

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section 8 Page 4

E.L. Smith Roundhouse Granite Shed

Name of Property

Barre, Washington County, Vermont

County and State

opportunity after many of the quarries in Scotland closed due to economic downturns. Many Italians settled in Barre during the boom years as well. Most of the Italians were sculptors and went to Barre to find fortune, hoping to return to Italy after. However, most decided to stay and sent for their families to join them.<sup>14</sup>

Besides the railroad making it easier to ship the precious commodity, three events helped secure Barre as a major producer of the state's granite. First, Barre granite was selected for the Vermont State House in Montpelier, which was completed in 1859; second the cities of Burlington and Rochester selected Barre granite for use in public memorials; and lastly in the 1890s (and probably most important), ten million paving blocks were order to be laid in the streets of Troy, New York. These commissions helped gain recognition for this growing business.<sup>15</sup> Shortly thereafter Barre, Vermont was dubbed the "the granite center of the world."<sup>16</sup>

The unusual design of the roundhouse granite shed can be attributed to Emery L. Smith, a quarry owner in Barre during the height of the granite industry boom. E.L. Smith came to Barre in 1866 after the Civil War, and he soon married the daughter of Elephalet Hewitt. In 1868 Smith bought his father-in-law's business with another Hewitt son-in-law, Auson Bradley, and began his forty-year tenure as a quarry owner.<sup>17</sup> Over the years Smith formed numerous partnerships, first with Bradley, whom he bought out before a year had passed, and then with C.M. Winch. Shortly thereafter Smith again became the sole proprietor by buying out Winch. In 1880 he formed another partnership, this time with Sumner Kimball, and they bought the old Parker quarry located on Millstone Hill in the northwest section of town, where the granite was known for its even grain and slightly bluish gray shade.<sup>18</sup> These became the Smith upper and lower quarries and supplied the majority of the firm's granite. This partnership remained intact until 1883 when Smith again bought out his partner and changed his company name to E.L. Smith &

<sup>14</sup> Clarke, 29-32

<sup>15</sup> Parker, 18

<sup>16</sup> Parker, 7

<sup>17</sup> Arthur W. Brayler *History of the Granite Industry of New England, Vol. 2*. (Boston: National Association of Granite Industries, 1913), 40-42

<sup>18</sup> T. Nelson Dale. *The Granites of Vermont*. (Washington, D.C.: Government Printing Office, 1909), 70

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section 8 Page 5

E.L. Smith Roundhouse Granite Shed  
Name of Property

Barre, Washington County, Vermont  
County and State

Co. He sold a half interest of his new company to John E. and Donald Smith, brothers but of no relation to Emery. By 1889, when the shed was built, E.L. Smith had become the sole owner and operator of both quarries. Smith continued to run the quarries and cutting shed until 1895, when he sold the remainder of his holdings to the Smith brothers.<sup>19</sup> E.L. Smith then went on to serve as the first mayor of the newly formed city of Barre.<sup>20</sup>

E.L. Smith was an innovator in the granite industry, and was the first to install a permanent derrick to move large pieces of granite. He also used electric batteries to detonate explosives, operated the first steam powered drill, and later, was the first to use a compressed air drilling apparatus. It was only natural that he experimented with the design of his cutting shed. The round shape and the building's unusual crane used to move granite maximized the use of all available space.<sup>21</sup>

One of the most significant features of the roundhouse shed is the original crane that, while it has evolved over time, still retains much of its original timber framing. There are no patent records of Smith's crane design, and most likely it was built based on several other crane and derrick designs. E.L. Smith's shed was located right near another granite cutting shed operator, Willis A. Lane.<sup>22</sup> Lane was known in the city of Barre for his ingenious inventions, including an 1890 stone-polishing machine, and he may have assisted Smith in the crane's conception.<sup>23</sup> Another possible source for inspiration and construction of the crane was the Lane Manufacturing Co. of Montpelier, Vermont, and of no relation to Willis A. Lane. This company specialized in the construction of overhead traveling cranes, and may have contributed as well.<sup>24</sup> One last possibility exists, in 1892 John R. Anderson patented a derrick-crane through the Lane Co., and his new technology made the upper sheave mechanism adjustable so it could be changed to

<sup>19</sup> Obituary of Emery L. Smith, Barre Daily Times, 1928, incomplete reference documentation

<sup>20</sup> Obituary of Emery L. Smith

<sup>21</sup> Clarke, 37

<sup>22</sup> Don Allen, in discussion with the author, November 8, 2007. Don Allen is the head of the Granite City Tool Co. in Barre.

<sup>23</sup> Patent No. 420,203 filed on January 28, 1890

<sup>24</sup> Don Allen, in discussion with the author, November 8, 2007



suit the amount of power needed. The design also indicates that the mast-cap is centrally

NPS Form 10-900-a  
(8-86)

OMB No. 1024-0018

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section 8 Page 6

E.L. Smith Roundhouse Granite Shed  
Name of Property

Barre, Washington County, Vermont  
County and State

located and thus can turn in a circular motion.<sup>25</sup> The roundhouse crane is also centrally located and can move in a similar fashion. It is possibly that the Lane Manufacturing Co. borrowed from this design when Anderson's derrick-crane was patented. The current crane operates from a central engine that is electric-powered. The original crane was powered by hand, relying on a large chain pulley to turn the center shaft.<sup>26</sup> The jib extends horizontally from the center shaft and runs parallel to the ground. The jib or arm connects to a rail that runs the entire 360° of the shed, allowing the arm to travel in a full circle. A small cart is located on top of the jib, also on a rail, and the cart connects to the hoist that lifts the stone. The cart is able to move from the central shaft to the wall, thus making it possible to move granite to any area of the shed. According to previous owners Paul Savard, and Norbert LaPrade, most of the original crane is intact. Savard changed the hoist and some of the wheels, and LaPrade replaced the old wooden cart with a metal one.

The technology of cranes and derricks is based on the simple use of levers, and a very early example uses rope that is tied off either to the trunk of a tree or to another location, then threaded over the top of a low horizontally growing branch and then stretched downward to connect to the object being lifted. This creates a primitive lever and allows one to pull on the rope to lift the object with less force.<sup>27</sup> The cranes produced in the nineteenth century were derivatives of a basic form that consisted of a right-angle triangle with upright sides called stalks and the jib or arm, and the hypotenuse-arm for support.<sup>28</sup> In the case of the roundhouse shed the hypotenuse was not needed because the jib connects to a second-story track for extra support. In the 1870s Thomas R. Morgan patented the overhead traveling crane, which allowed for a cart to be mounted on an overhead bridge (or rail) traveling back and forth along the track. This technology is also

<sup>25</sup> Patent No. 479,730 filed on July 26, 1892

<sup>26</sup> Paul Savard, in discussion with the author, October 27, 2007, Savard owned the roundhouse shed in the late 1970s. He removed the chain, which was not in use, because the crane had been converted to electric power.

<sup>27</sup> Joseph Glynn. *Construction of Cranes*. (New York: D. Van Nostrand Co., 1887), 2

<sup>28</sup> Glynn, 92-93



United States Department of the Interior  
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET

Section 8 Page 7

E.L. Smith Roundhouse Granite Shed

Name of Property

Barre, Washington County, Vermont

County and State

seen in the roundhouse shed's crane; as mentioned, a rail runs along the top of the jib and a cart is able to move back and forth along the arm.

Numerous cranes and derricks, or combinations of the two have received patents in the United States. Some of them use the idea of circular motion. Orlando C. Brown patented an improvement in derricks and cranes on October 8, 1872, providing a means of transferring power with greater ease. Brown's crane uses a rope that can be wound by hand around a drum.<sup>29</sup> This is similar technology to the pulley employed at the roundhouse shed, before it was converted to electric power. Brown's invention also provided a central shaft that rotated allowing the jib to revolve around the center in a circular motion, although not in a full circle.<sup>30</sup> Thirteen years later, William S. Dolan patented a rotary crane and derrick. This crane stands on a platform that can be mounted on wheels to make it a traveling crane, or secured to the ground keeping it stationary. The simple crane stands on a circular track that is connected to the platform, the circular track is spun by use of a pulley located away from the shaft, which runs to a crank; the boom is held in balance by a counter weight. This design allows for heavy objects to be moved 360 degrees, just as the roundhouse crane. While there are no records of the design of the roundhouse crane it is possible that Dolan's design influenced this technology.<sup>31</sup>

The shed continues to operate as Hardrock Granite, a company that cuts granite for monuments and headstones. Barre, which once had numerous individually owned quarries, is now home only to the Rock of Ages, Inc., which owns all of the city's quarries. The granite industry prospered into the 1920s, but the Great Depression ended this period of rapid growth and the granite industry never fully recovered after the depression ended.<sup>32</sup> The Rock of Ages, Inc. first consolidated in 1930 buying ten of the city's quarries, which consisted of one third of the granite quarrying industry. In 1986 Maurice Kelly sold the Well-Lamson Company, the last independently owned quarry, to

<sup>29</sup> Patent No. 131,934 filed on October 8, 1872

<sup>30</sup> Patent No. 131,934 filed on October 8, 1872

<sup>31</sup> Patent No. 349, 148 filed on October 27, 1885

<sup>32</sup> Gove, 83

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section 8 Page 8

E.L. Smith Roundhouse Granite Shed  
Name of Property

Barre, Washington County, Vermont  
County and State

---

Rock of Ages, Inc.<sup>33</sup> Currently Rock of Ages, Inc. quarries the city's granite, and then private cutting sheds, such as Hardrock, buy the granite in pieces ranging from four to ten tons. These larger pieces are then cut down to headstones and monuments, for example.<sup>34</sup> The principal quarry of Rock of Ages, Inc. is the old E.L. Smith upper quarry located in what is now called Graniteville.

---

<sup>33</sup> Clarke, 62

<sup>34</sup> Norbert LaPrade, in discussion with the author, October 27, 2007

**Narrative Statement of Significance:**

(Explain the significance of the property on one or more continuation sheets.) See continuation sheet.

**9. Major Bibliographical References**

**Bibliography:**

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.) See continuation sheet.

**Previous Documentation on File (NPS):**

- ☐ Preliminary determination of individual listing (36 CFR 67) has been requested.
- ☐ Previously listed in the National Register.
- ☐ Previously determined eligible for the National Register.
- ☐ Designated a National Historic Landmark.
- ☐ Recorded by Historic American Buildings Survey No. \_\_\_\_\_
- ☒ Recorded by Historic American Engineering Record No. VT-8

**Primary Location of Additional Data:**

- ☒ State Historic Preservation Office.
- ☐ Other state agency: Vermont Agency of Transportation
- ☒ Federal agency.
- ☐ Local government.
- ☒ University.
- ☒ Other. Name of repository: Aldrich Public Library

**10. Geographical Data**

**Acreage of Property:** less than one acre

**UTM References** (Place additional UTM references on a continuation sheet). ☒ See continuation sheet

Zone	Easting	Northing	Zone	Easting	Northing
1. 18	0699318	4896786	2. _____	_____	_____
3. _____	_____	_____	4. _____	_____	_____

**Verbal Boundary Description** (Describe the boundaries of the property on a continuation sheet.) See continuation sheet.

**Boundary Justification** (Explain why the boundaries were selected on a continuation sheet.) See continuation sheet

**11. Form Prepared By**

Name / Title: Sara Casten / MS Candidate in Historic Preservation

Organization: University of Vermont

Date: May 15, 2010

Street & Number: 133 South Prospect Street

Telephone: (802)-656-3180

City or Town: Burlington

State: VT Zip Code: 05405

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section 9 Page 1

E.L. Smith Roundhouse Granite Shed

**Name of Property**

Barre, Washington County, Vermont

**County and State**

---

**Bibliography**

Allen, Don. Telephone conversation with the author, 8 November, 2007.

Barre City Directory. Newburgh, NY: LP Waite, 1890.

Belding, John, photographer. Turn of the 20<sup>th</sup> Century image of the roundhouse shed and office.  
The glass plate was bought for the Aldrich Public Library with a grant from the Vermont  
Historical Society

Brayler, Arthur W. History of the Granite Industry of New England, Vol.2. Boston: National  
Association of Granite Industries, 1913.

Chamberlain, Holly K. HAER, 17 March 1987

Clarke, Rod. Carved in Stone: A History of the Barre Granite Industry. Barre, VT: North Light  
Studio, 1989.

Dale, T. Nelson. The Granites of Vermont. Washington, DC: Government Printing Office, 1909

Glynn, Joseph. Construction of Cranes. New York: D. Van Nostrand Co., 1887.

Gove, Bill. The Sky Route to the Quarries: History of the Barre Railroad. St. Johnsbury, VT:  
Quarry View, 2004.

Hungerford, Edward et al. Vermont Central/Central Vermont: A Study in Human Effort.  
Boston: The Railway and Locomotive Historical Society, 1942.

LaPrade, Norbert. Conversation with the author, 27 October 2007.

Montpelier, Barre, Waterbury and Northfield City Directory. Glen Falls, NY: The National Directory, 1880.

Smith, Emery L., Barre Daily Times, Obituary, 1928.

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section 9 Page 2

E.L Smith Roundhouse Granite Shed  
**Name of Property**

Barre, Washington County, Vermont  
**County and State**

---

Parker, Todd. The Story of the Rock of Ages. Montpelier: Boutwell, Milne and Varnum, 1925.

Patent No. 131,934 filed 8 October 1872.

Patent No. 349, 148 filed 27 October 1885.

Patent No. 420,203 filed 28 January 1890.

Patent No. 479,730 filed 26 July 1892.

Sanborn Insurance Map. Barre, Vermont, 1925.

Savard, Paul. Telephone conversation with the author, 27 October 2007.

Warrenty Deed. Hardrock Granite, Co.



United States Department of the Interior  
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET

Section 10 Page 1

E.L. Smith Roundhouse Granite Shed  
Name of Property

Barre, Washington County, Vermont  
County and State

---

**Verbal Boundary Description**

Commencing at a stone bound set in the center of Camolli easterly stock yard in the center of the side track leading from Burnham Street; thence running south  $24^{\circ}15'$  east a distance of 96.2 feet; thence turning an angle to the right of  $18^{\circ}13'$  and running a distance of 28.4 feet; thence turning an angle of  $90^{\circ}$  to the right and running a distance of 145.3 feet; thence turning an angle of  $73^{\circ}15'$  to the right and running 18 feet to the southwest corner of the old polishing mill; thence turning an angle to the right and running along the westerly line of the old polishing mill a distance of 39.5 feet; thence tuning an angle of  $90^{\circ}$  to the right and running a distance of 11.5 feet; thence turning and angle of 90 degrees to the left and running a distance of 112 feet; thence turning an angle of  $23^{\circ}30'$  to the left and running a distance of 115.5 feet; to the southerly side of Burnham Street; thence turning an angle  $109^{\circ}27'$  to the right and running east in the southerly line of Burnham Street a distance of 59.6 feet; thence turning an angle to the right of  $23^{\circ}$  and running east on the southerly line of Burnham Street a distance of 66.1 feet; thence turning an angle to the right of  $12^{\circ}45'$  and running east in the southerly line of Burnham Street a distance of 64.3 feet; thence turning an angle to the right of  $70^{\circ}$  and running south a distance of 112 feet to the stone bound point at the beginning.

**Boundary Justification**

This is the lot historically associated with the building.

---

**12. Additional Documentation:** Photograph documentation see continuation sheet

---

Submit the following items with the completed form:

**Continuation Sheets**

**Maps**

A USGS map (7.5 or 15 minute series) indicating the property's location.

A sketch map for historic districts and properties having large acreage or numerous resources.

**Photographs**

Representative black and white photographs of the property.

**Additional Items** (Check with the SHPO or FPO for any additional items)

---

**13. Property Owner**

---

(Complete this item at the request of the SHPO or FPO.)

Name / Title: Fred Craige

Organization: Hardrock Granite Company Date: May 15, 2010

Street & Number: PO Box 446 Telephone: (802)-479-3606

City or Town: Barre State: VT Zip Code: 05641

---

**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. 470 et seq.). A federal agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number.

**Estimated Burden Statement:** Public reporting burden for this form is estimated to average 18.1 hours per response including the 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 Keeper, National Register of Historic Places, 1849 "C" Street NW, Washington, DC 20240.

**United States Department of the Interior  
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET**

Section 12 Page 1

E.L. Smith Roundhouse Granite Shed

**Name of Property**

Barre, Washington County, Vermont

**County and State**

---

The following information applies to all photographs, except for photograph #8.

E.L. Smith Roundhouse Granite Shed

Barre

Washington County, Vermont

Sara Casten, photographer

October 2007

1. Facing Southeast, Office, 1940s addition, and EL Smith Roundhouse Granite Shed
2. Facing North, 1940s addition, and EL Smith Roundhouse Granite Shed
3. Facing South, Office
4. Facing West, 1940s addition
5. Facing Northwest, EL Smith Roundhouse Granite Shed
6. Facing South, Interior EL Smith Roundhouse Granite Shed
7. Facing Southeast, Interior, 1940s addition

8. E.L. Smith Roundhouse Granite Shed

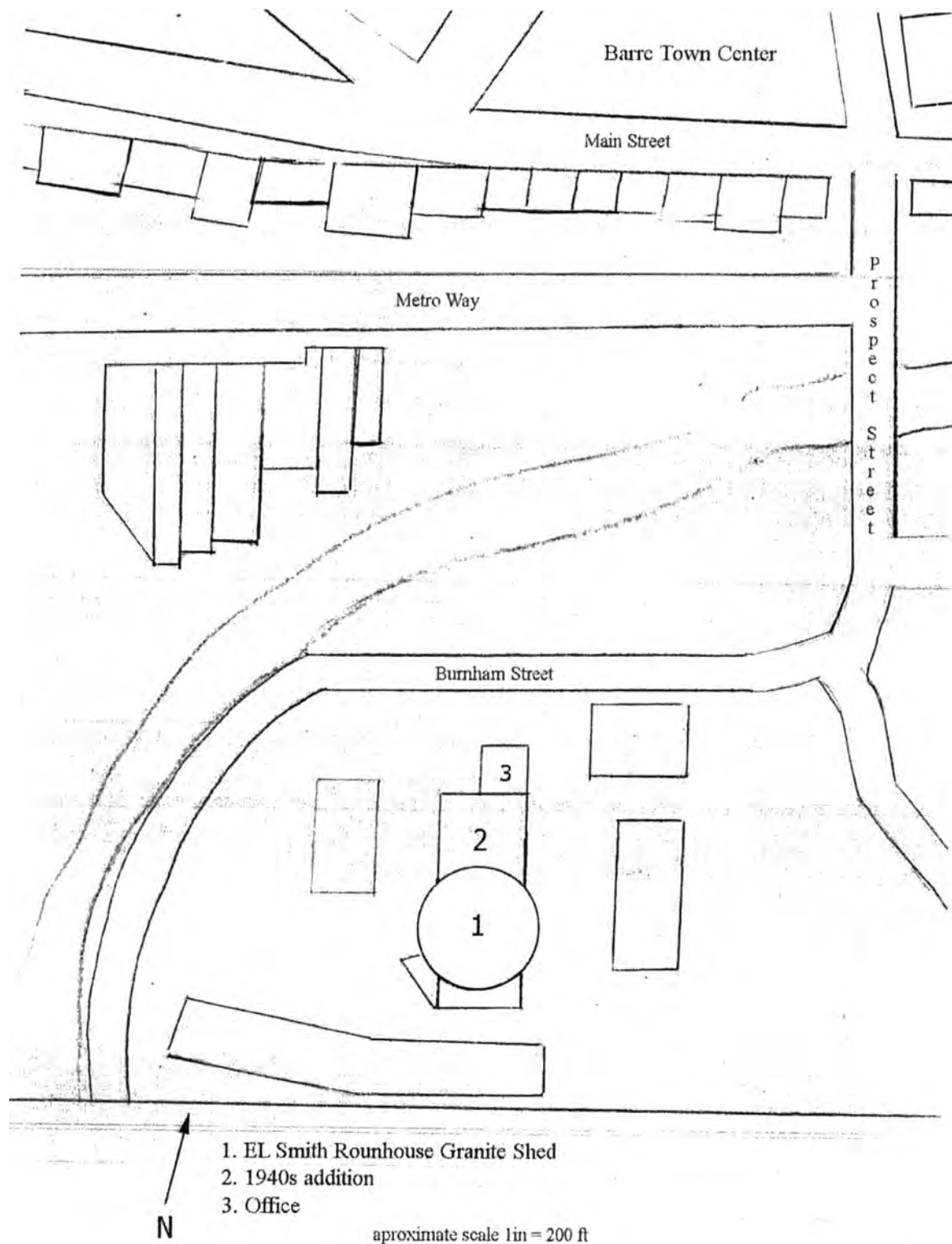
Barre

Washington County, Vermont

John Belding, photographer

c. 1900

Facing South



EL Smith Roundhouse Granite Shed  
Barre, Washington County  
Vermont

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES  
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY NAME: Smith, E.L., Roundhouse Granite Shed

MULTIPLE  
NAME:

STATE & COUNTY: VERMONT, Washington

DATE RECEIVED: 8/11/11 DATE OF PENDING LIST: 9/08/11  
DATE OF 16TH DAY: 9/23/11 DATE OF 45TH DAY: 9/26/11  
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 11000704

REASONS FOR REVIEW:

APPEAL: N DATA PROBLEM: N LANDSCAPE: N LESS THAN 50 YEARS: N  
OTHER: N PDIL: N PERIOD: N PROGRAM UNAPPROVED: N  
REQUEST: Y SAMPLE: N SLR DRAFT: N NATIONAL: N

COMMENT WAIVER: N

☒ ACCEPT ☐ RETURN ☐ REJECT 9/26/11 DATE

ABSTRACT/SUMMARY COMMENTS:

*Granite Roundhouse Shed - important resource  
in the <sup>Cutting</sup> VT granite industry - POS 1889-1955  
State-level of significance*

RECOM./CRITERIA A C

REVIEWER [Signature]

DISCIPLINE [Signature]

TELEPHONE \_\_\_\_\_

DATE 9/26/11

DOCUMENTATION see attached comments Y/N see attached SLR Y/N

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





El Smith Roundhouse Granite Shed

Barre

Washington County, Vermont

#1



El Smith Roundhouse Granite Shed  
Barre

Washington County, Vermont

#2





EL Smith Roundhouse Granite Shed

Barre

Washington County, Vermont

#3



EL Smith Loundhouse Granite Shed

Bonne

Washington County, Vermont

#4



El Smith Roundhouse (Granite Shed)

Barre

Washington County, Vermont

#5.





EL Smith Roundhouse Granite Shed

Barre

Washington County, Vermont

#6.



El Smith Roundhouse Granite Shed

Barre

Washington County, Vermont

#7



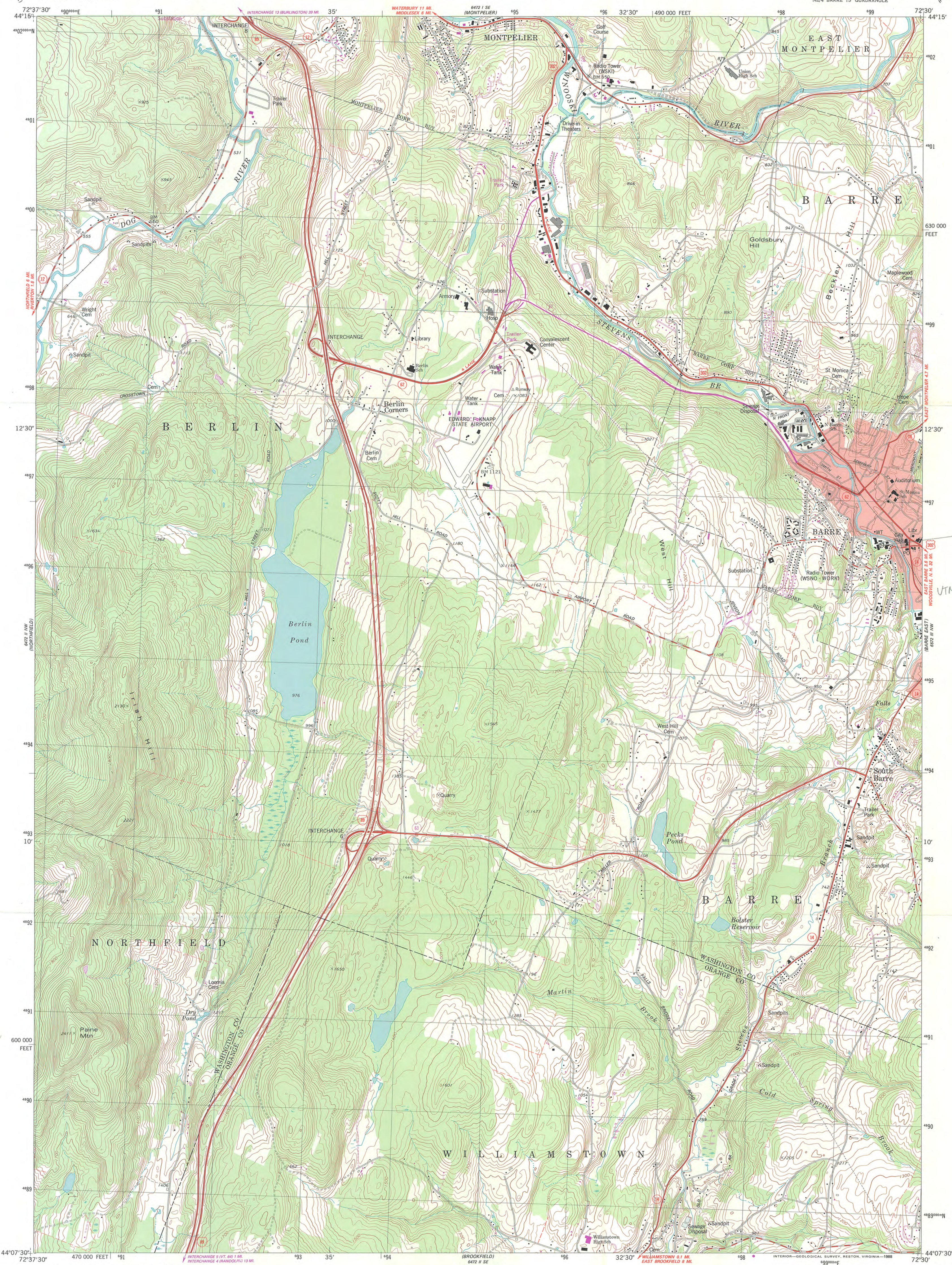
EL Smith Roundhouse Shed

Barre

Washington County, Vermont

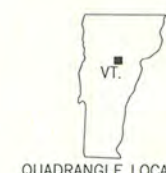
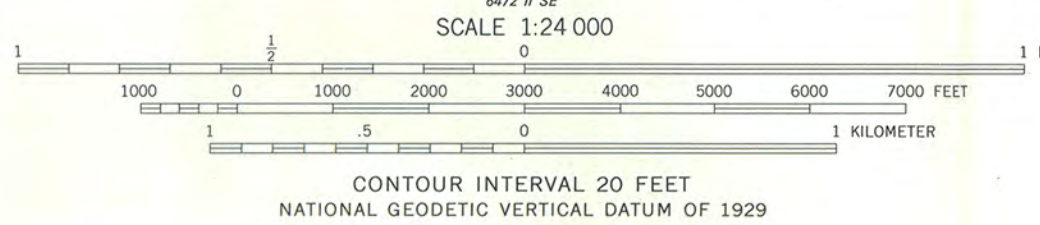
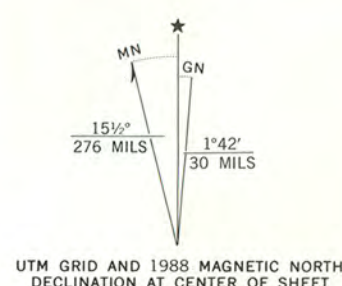
#8





Mapped, edited, and published by the Geological Survey

Control by USGS and NOS/NOAA  
Topography by photogrammetric methods from aerial photographs taken 1973. Field checked 1975. Map edited 1978  
Projection and 10,000-foot grid ticks: Vermont coordinate system (transverse Mercator)  
1000-meter Universal Transverse Mercator grid, zone 18  
1927 North American datum  
To place on the predicted North American Datum 1983 move the projection lines 2 meters south and 36 meters west as shown by dashed corner ticks  
Fine red dashed lines indicate selected fence and field lines where generally visible on aerial photographs. This information is unchecked  
Red tint indicates area in which only landmark buildings are shown



QUADRANGLE LOCATION  
Revisions shown in purple and woodland compiled from aerial photographs taken 1983 and other sources  
This information not field checked. Map edited 1988

**ROAD CLASSIFICATION**  
Primary highway, hard surface  
Secondary highway, hard surface  
Light-duty road, hard or improved surface  
Unimproved road  
Interstate Route  
U. S. Route  
State Route

BARRE WEST, VT.  
NE/4 BARRE 15' QUADRANGLE  
44072-B5-TF-024  
1978  
PHOTOREVISED 1988  
DMA 6472 II NE-SERIES V813

EL Smith Roundhouse  
Granite Shed  
Barre  
Washington Co., VT  
VTM Reference:  
18 06 99 318  
4896786







**State of Vermont**  
**Division for Historic Preservation**  
One National Life Drive, Floor 2  
Montpelier, VT 05620-1201  
[www.HistoricVermont.org](http://www.HistoricVermont.org)

[phone] 802-828-3211  
[Division fax] 802-828-3206

*Agency of Commerce and  
Community Development*



August 4, 2011

J. Paul Loether  
National Park Service  
National Register of Historic Places  
1201 Eye Street, NW 8<sup>th</sup> Floor  
Washington, DC 20005

Dear Mr. Loether:

Enclosed please find the National Register nomination for the following property:

**E.L. Smith Roundhouse Granite Shed, Barre, Washington County, Vermont**

This property is being submitted under the Preservation Act of 1966, as amended in 1980, for inclusion in the National Register of Historic Places.

If you have any questions concerning the nomination please do not hesitate to contact me at (802) 828-3540 or [diane.mcinerney@state.vt.us](mailto:diane.mcinerney@state.vt.us).

Sincerely,  
DIVISION FOR HISTORIC PRESERVATION

A handwritten signature in cursive script that reads "Diane McInerney".

Diane McInerney  
Historic Preservation Executive Grant Programs Coordinator

