

United States Department of the Interior
Heritage Conservation and Recreation Service

National Register of Historic Places Inventory—Nomination Form

See instructions in *How to Complete National Register Forms*
Type all entries—complete applicable sections

For HCRS use only

received AUG 31 1982

date entered

1. Name

historic Machine Shop Village

and/or common Same

2. Location

*Roughly bounded by Main, Pleasant, Clarendon,
Water, 2nd Sts., and B & M Railroad*

street & number Multiple

N/A not for publication

city, town North Andover

N/A vicinity of

congressional district

Sixth

state Massachusetts

code 025

county

Essex

code 009

3. Classification

Category

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

Ownership

☐ public
☒ private
☐ both

Public Acquisition

N/A in process
☐ being considered

Status

☒ occupied
☐ unoccupied
☐ work in progress
☐ Accessible
☐ yes: restricted
☒ yes: unrestricted
☐ no

Present Use

☐ agriculture
☒ commercial
☒ educational
☐ entertainment
☐ government
☒ industrial
☐ military
☐ museum
☐ park
☒ private residence
☒ religious
☐ scientific
☐ transportation
☐ other:

4. Owner of Property

name Multiple (see attached list)

street & number Multiple

city, town North Andover

N/A vicinity of

state Massachusetts 01845

5. Location of Legal Description

courthouse, registry of deeds, etc. After 1860: Essex County Registry (North Dist.)
Before 1860: Essex County Registry (South Dist.)

street & number 381 Common Street, Lawrence
32 Federal Street, Salem

city, town

see above

state Massachusetts

6. Representation in Existing Surveys

title Inventory of the Historic Assets
of the Commonwealth, Area D

has this property been determined eligible? ☐ yes ☒ no

date 1970, 1974

☐ federal ☒ state ☐ county ☐ local

depository for survey records Massachusetts Historical Commission

city, town Boston

state Massachusetts 02108

7. Description

Machine Shop Village, North Andover

Condition

☒ excellent
☐ good
☐ fair

☐ deteriorated
☐ ruins
☐ unexposed

Check one

☒ unaltered
☒ altered

Check one

☒ original site
☒ moved

date N/A

Describe the present and original (if known) physical appearance

Machine Shop Village is a mid-nineteenth century factory neighborhood which grew up along Cochi Chewick Brook in North Andover. The district contains approximately 160 structures on 90 acres of land, sloping gently downward from Main Street on the west to Osgood Mill Pond and the Boston & Maine Railroad on the east. Immediately to the north of Machine Shop Village is the town's civic and commercial center.

The architecture of Machine Shop Village is dominated by the conservative, functional outlook of the industries which created the neighborhood. Sturdy brick mill complexes are complemented by rows of very simple, vernacular workers' housing -- the most pervasive building type. A full spectrum of building types, however, is achieved in the Village's several stores, three churches, school, and range of middle and high style residences. Siting, scale, and landscaping follow various patterns, reflecting the multifarious functions of this district.

The massive brick structures of Davis & Furber Machine Company, located east of the Water Street and Elm Street intersection, form the physical (and once economic) core of Machine Shop Village. Founded in 1832, the company experienced periods of concentrated expansion in the 1860s (from which date the earliest extant structures) and 1880s, and today contains about a dozen buildings. From the first period, and relatively unaltered, is Machine Shop #1 (1860; Photo #2, Map #136). The building was designed by Phineas Stevens, an engineer, and is a clear conservative example of the Greek Revival style in factory architecture. The main block of the brick structure is 4½ stories high, with a gable roof, corbelled entablature and returns, and 6 over 6 windows with granite sills and lintels.

The most impressive structure from the later period of Davis & Furber's growth is the Office and Card Clothing Building #7 (1887; Photo #3, Map #135), designed by architect Augustus Stevens of Manchester, NH. The long length of this flat-roofed, brick building is articulated vertically by piers ending in pairs of corbelled brackets. Horizontally, ornamental brick corbelling, dentils, and hood molding distinguish the three stories of segmentally arched windows. The striking Elm Street facade has a gabled frontispiece with a Romanesque arched entrance; its patterning is echoed by a prominent 5½ story tower at the rear of the building. The Mule or "Cement" Building (1920; Map #137) is a modern example of the company's functional approach to mill building, using reinforced concrete and steel construction.

The second mill complex in the district is the original North Andover Mills, since altered to house a light manufacturing operation. The complex began operation as a woolen mill c. 1825 with the small Stone Mill Building (Map #2) dating to that year. This structure, set into the slope of a small embankment, is built two stories high of coursed granite fieldstone with a gable roof and regularly spaced rectangular windows on its upper story. The main North Andover Mill (1839; Photo #1, Map #1) is characteristic of larger mid-19th century brick mills, built with 3 stories, a gable roof, and tied-in walls. A fourth story was added late in the century, creating a flat-roofed structure. The mill is simply designed, the three original lower stories having rectangular windows with granite sills and lintels, the fourth story having segmentally arched windows. A five-story bell and water tower is centered on the original facade. Also surviving on the site are the mill pond and a fieldstone wool storehouse (1844).

Within a short distance of Davis & Furber and the North Andover Mills are residential sections which retain their mid-to-late 19th century appearance with virtually no modern intrusion. These fall into two major categories: (1) the rows of double cottages, 2-story duplexes, and boarding houses building by the factories; and (2) the single family homes of the machinists, overseers, and owners of the companies.

**United States Department of the Interior
Heritage Conservation and Recreation Service**

**National Register of Historic Places
Inventory—Nomination Form**

For HCRS use only

received

date entered

Continuation sheet

Item number

7

Page

2

"Yellow Row" (Photo #4, Maps #87-94), a series of eight double cottages on Water Street, was built by the North Andover Mills beginning in 1839. Its conservative, no-frills Federal style -- featuring 1½ stories, gable roof, and paired center entrances on a three-bay facade -- was to become the standard for much of the Village's company housing. Davis & Furber used this spare, flank-gabled style in a variety of forms: 1½ story duplexes on East Water Street; 2-story double houses on Pleasant Street, and 2½ story, six unit tenements on East Water Street. These were nearly all built in the 1860s David & Fuber building boom, and so display transitional Greek Revival and Italianate details (i.e., frieze windows and minimal door hoods). Most are still standing, little changed.

Factory supervisors and machinists working for Davis & Furber built somewhat larger and more stylish homes in the middle of the 19th century. 1½ and 2½ story sidehall plans in the Greek Revival and Italianate styles are characteristic of the period, and Elm Street (Photo #6, Map #s 120, 121, 122) is particularly rich in this type. Simple entablatures, gable returns, porches, and sidelighted doorways are recurring details. In a few cases, traditional center-entrance designs from the same period use unexpectedly elaborate decoration, as seen in the brackets and cornices of 10-12 Wiley Court (Map #140) and in the label moldings of 34 Elm Street (Map #118).

Throughout the nineteenth century, several mill owners selected sites in the Village for their mansions; two are still standing, in sharp contrast to the simple factory housing of the period. The George Hodges House, 266 Main Street (ca. 1839; Photo #9, Map #25), is an outstanding but essentially conservative Greek Revival residence. The rectangular main block has a center entrance on its flushboarded facade; corner pilasters, fully pedimented gable ends, and an octagonal cupola highlight the design. The Hodges House is also remarkable for the survival of much of its original landscape, including a large fenced lot, barn, sheds, gardens, and trees.

The Second Empire Wiley Mansion, 93 Elm Street (1864-65; Photo #10, Map #133), represented the highest style house in town when it was built by a partner in Davis & Furber. Designed by G.F. Meacham, this impressive building is 2½ stories high with a mansard roof, rusticated wood siding, and a recessed center bay. Heavily ornamented with a cupola, paired eaves brackets, classical window cornices, and elaborate dormers and porches, the Wiley Mansion is a striking counterpoint to the factory buildings across Water Street.

Most of the late Victorian, upper class residences in Machine Shop Village are found along Main Street, which retains its suburban appearance. The Francis Clark House, 247 Main Street (1880; Photo #11, Map #22), was designed by George Adams, a Lawrence architect, in the stick style. This is a free-wheeling composition of wings, bays, dormers, and porches, capped by a steep gable roof with slate shingles and iron filigree cresting. Most outstanding is the lavish use of stickwork and elaborately structured porches. Next door, the George E. Wilson House, 257 Main Street (1880-81; Map #24) another stick style house -- has a traditional side hall plan animated with a gable truss, attic story balcony, stickwork, eaves brackets, and front veranda. Of the same period and comparable in architectural intent is the Blanchard House, 10 Elm Street (ca. 1881; Photo #12, Map #114). William C. Richardson (later of the famous Boston firm of Hartwell & Richardson) designed this large Queen Anne style house with moderating Shingle Style characteristics. Separate clapboard and shingle sided stories enclose simple volumetric shapes, curved surfaces, recessed porches, and patterned shingling. These Main Street houses are set well back from the street with generous side lots complementing their distinctive architectural details.

**United States Department of the Interior
Heritage Conservation and Recreation Service**

**National Register of Historic Places
Inventory—Nomination Form**

For HCRS use only

received

date entered

Continuation sheet

Item number

7

Page

3

Three churches from the mid-19th century still stand in Machine Shop Village. The most important architecturally is the Trinitarian Congregational Church, 70 Elm Street (1865; Photo #13, Map #127), which was designed by John Stevens of Boston. The building is an excellent exposition of Stevens' favorite Romanesque Revival style, using flushboarded wood construction to imitate masonry forms. Narrow buttresses visually brace the nave which also features eaves brackets and round arched windows with label molding. A gabled frontispiece on the facade forms the base for an elaborate, three-stage tower and steeple--a landmark visible from surrounding towns in the Merrimack Valley.

Only a few of the once numerous small shops, stores, and civic structures remain in Machine Shop Village. Historically, these structures have concentrated on Water Street between Elm and Main. The vernacular Greek Revival building at 94 Elm Street (Map #132) was built as a store by Stephen Parker in 1860-61. A small, vernacular two-story structure at 73 Water Street (Map #78) was built outside the district in 1865 as a police station but was moved 10 years later and converted to commercial use. Two substantial civic buildings once stood on the northwest portion of Water Street, both built in the Second Empire style. Merrimack Hall (1882; also known as St. Michael's Parish Hall) and the Eben Sutton Steamer House (1872) boasted such impressive details as mansard roofs, elaborate wall and window cornices, and round arched dormers.

Despite its location next to the modern commercial center of town, Machine Shop Village is a notably intact reflection of the diverse elements which formed a nineteenth century factory village. Changing development patterns have located new construction outside of the district, and very few modern alterations have been made to the historic structures and settings which define the neighborhood.

8. Significance

Period	Areas of Significance—Check and justify below			
☐ prehistoric	☐ archeology-prehistoric	☐ community planning	☐ landscape architecture	☐ religion
☐ 1400–1499	☐ archeology-historic	☐ conservation	☐ law	☐ science
☐ 1500–1599	☐ agriculture	☐ economics	☐ literature	☐ sculpture
☐ 1600–1699	☒ architecture	☐ education	☐ military	☐ social/
☐ 1700–1799	☐ art	☐ engineering	☐ music	☐ humanitarian
☒ 1800–1899	☐ commerce	☐ exploration/settlement	☐ philosophy	☐ theater
☒ 1900–	☐ communications	☒ industry	☐ politics/government	☐ transportation
		☐ invention		☐ other (specify)

Specific dates *NA* **Builder/Architect** John Stevens, Boston, architect
 George Adams, Lawrence, architect
 William C. Richardson, Boston architect
 G.F. Meacham, architect
 James Allen, architect
 Abbott & Clement, North Andover, builders

Statement of Significance (in one paragraph)

Machine Shop Village represents the survival and evolution of a New England factory village. The district retains its integrity of design, setting, materials, and feeling; it is significant not only to the development of North Andover, but also to the growth of textile manufacturing in the Merrimack Valley and the growth of machine shop development in the Northeast. Machine Shop Village thus meets criteria A, B, and C of the National Register.

Industrial Development

During the time of its greatest use, Cochichewick Brook supported four major textile-related mills in North Andover. Machine Shop Village contains two of these mill sites, which once formed the basis of economic and social activity in the area.

Grist mills and fulling mills were established in North Andover in the seventeenth century, but not until 1802 was the first of three major woolen mills established. James Scholfield managed this mill, which was later taken over by the Sutton family. A second mill for the manufacture of broadcloth and flannels was constructed in 1813 by Nathaniel Stevens. The partnership of Pranker and Hodges initiated a third woolen factory in 1828, leasing space in the stone mill built between 1822–25 for Dr. Joseph Kittredge. This third mill was located midway between the Sutton and Stevens mills, at what is now called Machine Shop Village. The original building was replaced by the present structure (1839; Photo #1, Map #1) by a new partnership of George Hodges, Eben Sutton, and Joseph Kittredge. In 1847, Sutton bought out the partnership and formed the North Andover Manufacturing Company (North Andover Mills).

North Andover was thus one of the pioneer mill towns in New England, gradually developing a large class of skilled laborers and mechanics. From the manufacture of woolen products it was but a step to the construction of the necessary machinery.

Woolen machinery manufacturing originated in Andover (then the South Parish) in 1832, when Sawyer, Phelps & Company began manufacturing cards and spinning jacks. The firm was succeeded by that of Gilbert & Richardson, which in 1836 moved to the North Parish on the Cochichewick, just upstream from the North Andover Mill. The business operated under various partners until 1851, when the name of the firm was changed to Davis & Furber. In addition to making cards and jacks, the company built nearly every kind of machine used in woolen manufacturing. For many years it was the largest manufacturer of this class of machinery in the United States.

North Andover experienced its golden industrial age from the 1860s through the 1880s. High demand for textiles during the Civil War continued into several decades of increasing prosperity. In 1880, for example, the Sutton Mill employed about 130 operatives and manufactured 450,000 pounds of flannel; 85 operatives at the Stevens Mill produced 300,000 pounds

9. Major Bibliographical References

Bailey, Sarah Loring. Historical Sketches of Andover, Boston: Houghton Mifflin, 1880.
Roper, Steven. "A Good In-land Town, and of a Good Prospect." North Andover: North Andover Historical Society, forthcoming.
North Andover Historical Society, Architectural files.

10. Geographical Data

Acreage of nominated property approx. 90

Quadrangle name South Groveland, Mass. and Lawrence, Mass.- Quadrangle scale 1:24,000
N.H.

UMT References

A 19 325650 4730090
Zone Easting Northing

B 19 325430 4729550
Zone Easting Northing

C 19 325740 4729080

D 19 325830 4729320

E 19 326130 4729120

F 19 326320 4729410

G

H

Verbal boundary description and justification Boundaries were selected to include the industrial, residential and civic structures historically associated with the Davis and Farber, and North Andover Mills. Together, they form an unusually large and cohesive industrial village. Please refer to the attached map.

List all states and counties for properties overlapping state or county boundaries

state	code	county	code
<u>N/A</u>			
state	code	county	code

11. Form Prepared By

name/title Wendy Frontiero, Preservation Planner with Martha Larson, North Andover Commission Historical

organization Massachusetts Historical Commission

date August 4, 1981

street & number 294 Washington Street

telephone (617) 727-8470

city or town Boston

state Massachusetts 02108

12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

 national X state local

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the Heritage Conservation and Recreation Service.

State Historic Preservation Officer signature

Valerie Ann Talmage

title Executive Director, Massachusetts Historical Commission

date Aug. 24, 1982

For HCRS use only

I hereby certify that this property is included in the National Register

Keeper of the National Register

date 10/14/82

Attest:

date

Chief of Registration

**United States Department of the Interior
Heritage Conservation and Recreation Service**

**National Register of Historic Places
Inventory—Nomination Form**

For HCERS use only

received

date entered

Continuation sheet

Item number

8

Page

2

of flannel; and the North Andover Manufacturing Company's 100 operatives manufactured another 300,000 pounds of flannel. Davis & Furber, in order to keep up with the textile manufacturers, constructed seven new buildings and made major additions to several existing buildings between 1860 and 1890. The oldest extant structure of Davis & Furber is Machine Shop #1 (1860; Photo #2, Map #135), an eclectic, High Victorian style structure which dominates the complex.

North Andover's three mills and machine shop began to decline in the Depression and limped through the mid-twentieth century. With the exception of Davis & Furber, all of the nineteenth century factories are now closed. In 1960, the Sutton Mill shut down, and its building subsequently underwent major renovations. The Stevens Mill ceased production in 1970, and was razed in 1974. Still standing in their nineteenth century condition -- and both in Machine Shop Village -- are the North Andover Mill (since 1973 used for plastics manufacturing by the Kenics Company) and Davis & Furber, which continues in operation despite drastically reduced production. The survival of these industrial complexes is a major historical and architectural asset of Machine Shop Village.

Residential, Ecclesiastical, and Civic Development

Since the mills and machine shops required a daily presence of many workers, a great demand for housing and other services grew in their vicinity. The mill owners met this demand over the years by constructing a wide variety of domestic and public buildings that remains largely intact in the Village today.

Among the earliest dwelling houses built for the mill operatives are the row of eight 1½-story double cottages along Water Street, on the banks of Osgood Mill Pond ("Yellow Row," Photos #4, Map#s 87-94). These houses were constructed around 1840 for workers at the North Andover Mills, using a very conservative Federal style. Although the design was common throughout New England in the early nineteenth century, its late appearance here set a standard for factory housing in Machine Shop Village.

In addition to the North Andover Mills Housing, three less standardized residential structures put up by Gilbert & Richardson (forerunner of Davis & Furber) in the 1830s still survive. The original company boardinghouse (1836) stood on the site of the present Congregational Church (for construction of which it was moved to 14 Pleasant Street, Map #28), and two 3-bay, single family houses were built at 59 and 65 Elm Street (Map 123 and 126), as rental housing for upper-level workers and their families. These Greek Revival structures exhibit a quaint grace despite their simplicity.

In contrast, George Hodge's mansion at 266 Main Street (ca. 1839; Photo #9, Map #25), shows the social strata already differentiating mill workers and mill owners. Although based on traditional patterns similar to the contemporaneous "Yellow Row," the Hodges House aspires to much grander effects through its splendid Greek Revival motifs.

A third, intermediate type of antebellum housing is represented by a row of small residences on the westerly side of Elm Street, built in the 1840s for middle-level factory workers at Davis & Furber (Photo #6, Maps #120, 121, 122). The group's conservative plans and restrained ornamentation are invigorated by a careful attention to the small details of window and door design. Similar scale, setback, and spacing unify the variety of Greek, Gothic, and Italianate styles employed here.

**United States Department of the Interior
Heritage Conservation and Recreation Service**

**National Register of Historic Places
Inventory—Nomination Form**

For HCRS use only

received

date entered

Continuation sheet

Item number

8

Page

3

The Civil War spurred demand for woolen goods and initiated a tremendous expansion of productive capacity in North Andover, with a corresponding enlargement of the factories' labor force. During the war, rows of housing for the workers, stores, churches, and impressive factory-owners' mansions appeared in the district. The cultural activity of town began to shift away from the old rural center to the south and became firmly fixed in Machine Shop Village. By 1872, the area boasted three churches, an engine house, school, union hall, and several stores.

In 1862, Davis & Furber embarked on a large-scale program to build housing for its workers. Over the next six years, open fields were converted into the compact neighborhood of workers' cottages and boardinghouses along Water, East Water, Clarendon, and Pleasant Street; some 50 residential buildings were constructed. During this period three basic housing types were employed, all using a traditional flank gable, center entrance design. The earliest along Water Street to Clarendon, were 1½ story double cottages; 2-story, multiple unit blocks were soon added on East Water Street and Bixby Avenue; after 1864, 2-story double houses were constructed along Pleasant Street. In addition, a very large three-family house and a boardinghouse with a store below were built on the corners of Bixby Avenue and Water Street. The local contracting firm of Abbott & Clement built at least two-thirds (and probably all) of the 1860s company housing, as well as the contemporary Congregational Church.

The sudden increase in business associated with the Civil War also enabled the partners in Davis & Furber to erect mansions and public buildings suitable to their status as successful businessmen and civic leaders. Unfortunately, of the three major residences constructed during the late nineteenth century, only one still stands -- the Wiley Mansion at 93 Elm Street (1864-65; Photo #10, Map #133). This early example of the Second Empire style is an excellent display of the era's new wealth and sophistication. Compared with the conservative factories and factory housing, the Wiley House was the first building in Machine Shop Village which looked forward in its architectural taste; it was built for a president of Davis & Furber.

The landmark Trinitarian Congregational Church (Photo #13, Map #127) was built in 1865 through the beneficence of the three partners in Davis & Furber and of the company itself. Architect John Stevens had designed Andover's Old South Church a few years earlier, and gave North Andover a strikingly similar, early Romanesque style church. Of particular social significance was the establishment of a Congregational Church separate from the rural Centre Village parish.

Development after the war was less intense but did fill out the physical framework established earlier in the century. Large new Davis & Furber mill buildings, a number of fashionable homes for factory supervisors and wealthy merchants, and a few new civic and institutional buildings were constructed. Company-built housing was more sporadic in this period and consisted mostly of remodeled private dwellings.

Main Street was the location for the most fashionable homes of this era in Machine Shop Village. Chief among these are the Francis Clark House, 247 Main Street (1880; Photo #11, Map #22), an elaborately detailed stick style structure built for the owner of a "fancy dry goods" store in Lawrence; the fanciful George E. Wilson House, 257 Main Street (1880-81; Map #24), another stick style house, built for a machine erector at Davis & Furber and the Blanchard House, 10 Elm Street, (ca. 1881, William C. Richardson, architect; Photo #12,

**United States Department of the Interior
Heritage Conservation and Recreation Service**

**National Register of Historic Places
Inventory—Nomination Form**

For HCERS use only

received

date entered

Continuation sheet

Item number

8

Page

4

Map #114), which appeared in the November 1881 issue of "American Architect and Building News" and was later used as the Episcopal rectory and as Davis & Furber-owned apartments.

The easterly side of Elm Street contains good examples of stylish middle-class homes from the turn of the century -- an interesting comparison with the mid-nineteenth century houses across the street. Typical of these are the Leverett Downing House, 45 Elm Street (1906, James Allen, architect; Map #117), a Shingle/Colonial Revival style home built for an independent inventor and machinist; the Colonial Revival style Elijah Wright House, 77 Elm Street (ca. 1910-11; Photo #7, Map #129) built for a machinist; and the Wiley-Wright House, 83 Elm Street (ca. 1881-1900; Photo #7, Map #131), a Queen Anne style house given by John Wiley to his nephew George Wright, a factory supervisor who succeeded his uncle as president of Davis & Furber. The owners of all three of these buildings were close relatives of Wiley through his wife, Eliza Downing.

Only a few public buildings were constructed during the boom period of the late nineteenth century, and most of these have since been destroyed or substantially altered. A public library (1851-52, remodeled 1872), Merrimack Hall (1882) and the Eben Sutton Steamer House (1872) are no longer standing. Nonetheless, the close-knit character and self-sufficiency of Machine Shop Village are still evident in the extant Methodist Episcopal Church (1849, remodeled late 19th century; Map #3); Congregational Church (1865, remodeled early 20th century; Map #12, Photo #13), and the Merrimack School (1865, rebuilt 1914; Map #7).

The importance of the mills -- and thus of Machine Shop Village -- to North Andover continued into the early twentieth century, when New England's entire textile industry began to decline. Machine Shop Village likewise suffered a period of stagnation, and with very limited exceptions the district has not been greatly altered in the twentieth century. Of greatest social significance in the last 20 years is the sale of Davis & Furber's company housing to private owners. Today there is a renewed interest among residents in the history and preservation of Machine Shop Village, an interest reflected in the careful maintenance of properties and in plans for re-use and revitalization of the Davis & Furber complex.

*Roman Catholic Church (1868, remodeled early 20th century; Map #8),

Property Owners and key to sketch map

1	Mill Pond Rd.	Kenics Corporation
2	Stone Mill Bldg.	" "
3	153 Main St.	St. Gregory's Armenian Apostolic Church
4	159 Main St.	Mr. & Mrs. Thomas Barnes
5	163 Main St.	Elizabeth & Sadie Mellian
6	*173-75 Main St.	Criscione Realty Trust 11 Trinity Place Winchester, Ma. 01890
7	178 Main St.	Roman Catholic Archdiocese of Boston (School) 196 Main St., No. Andover
8	190 Main St.	" " (Church)
9	179-181 Main St.	Mr. & Mrs. John Willis 60 Chestnut St., No. Andover, Ma. 01845
10	185-187 Main St.	
11	193 Main St.	Roman Catholic Archdiocese of Boston 196 Main St. No. Andover, Ma. 01845
12	196 Main St.	" " (Rectory)
13	206-8 Main St.	Mr. & Mrs. James Burke
14	205-7 Main St.	Mr. & Mrs. John Burns
15	219 Main St.	Mr. & Mrs. David Wallwork
16	222 Main St.	Jean & Elizabeth Phaneuf
17	225-27 Main St.	Mr. & Mrs. John Coogan
18	226 Main St.	Mr. & Mrs. Robert G. Habeeb 9 Bearse Ave., Methuen, Ma. 01844
19	233 Main St.	Mrs. Vincenzo Rigoli
20	*234 Main St.	Mr. & Mrs. Thomas Ceplikas
21	242-44 Main St.	Mrs. Marilyn McPhee
22	247 Main St.	Mr. & Mrs. Richard Fournier
23	250 Main St.	Trinitarian Congregational Church (Rectory) 70 Elm St., No. Andover, Ma. 01845
24	257 Main St.	Mrs. Mary Atkinson
25	266 Main St.	Miss Sarah Field
27	9 Pleasant St.	Mr. & Mrs. Stephen Foster
28	14 Pleasant St.	Abel Realty Trust 281A Broadway, Lawrence, MA. 01840
29	15 Pleasant St.	Mr. Gary Wentworth
30	19-21 Pleasant St.	Mr. & Mrs. Peter Giribaldi
31	20-22 Pleasant St.	Mr. & Mrs. Daniel Driscoll, Jr.

*Intrusion

Key to Sketch Map page 2

32	25-27 Pleasant St.	Mr. & Mrs. Jose Gonzales
33	26-28 Pleasant St.	Mr. & Mrs. Velishka
34	31-33 Pleasant St.	Mr. & Mrs. Charles Karashashian
35	32-34 Pleasant St.	Mr. & Mrs. James Dawson
36	37-39 Pleasant St.	Mr. & Mrs. Robert Chaisson
37	38-40 Pleasant St.	Mr. & Mrs. Clifton Waldred
38	43-45 Pleasant St.	Mr. & Mrs. John D. & Yuen S. Eng
39	44-46 Pleasant St.	Mr. & Mrs. Frederick Crosdale Jr.
40	49-51 Pleasant St.	Mr. & Mrs. Peter Anderson
41	52 Pleasant St.	Henry A. Pangione
42	55-57 Pleasant St.	Mr. & Mrs. Arthur Walsh
43	60-62 Pleasant St.	Mr. & Mrs. Edward Manning
44	61-63 Pleasant St.	Mr. & Mrs. William Pickles
45	67-69 Pleasant St.	Mr. & Mrs. Alfred Matthews
46	70-72 Pleasant St.	Tiffany Realty Trust Box 262 W. Boxford, MA 01885
47	71-73 Pleasant St.	Mr. & Mrs. Roy Bird
48	77-79 Pleasant St.	Mr. & Mrs. Peter Martin
49	87-89 Pleasant St.	Mr. & Mrs. Wilfred Nadeau 89 Pleasant St.
50	93-95 Pleasant St.	J.J. Caffrey 3rd. 93 Pleasant St.
51	105-107 Pleasant St.	Hollis A. Curtis, Jr. 14 Bixby Ave., No. Andover
53	115-117 Pleasant St.	Mr. & Mrs. Donald Phair 117 Pleasant St.
54	34-44 East Water St.	Mr. & Mrs. Wm. E. Shann 44 E. Water St.
55	31-41 East Water St.	Mrs. Roberta Elliot 2 Russet Lane, Andover, MA 01810
56	28-30 East Water St.	Mr. & Mrs. Dean Thornhill
57	19-21 East Water St.	Vincent Carroll 17 S. Bowdoin St., Lawrence, MA 01843
58	24-26 East Water St.	Mr. & Mrs. Allan Furneaux 38 Davis St.
59	18-20 East Water St.	Mr. & Mrs. Robert Nagri 14 Loren Rd. Salem, NH 03079
60	10-12 East Water St.	Mr. & Mrs. Michael Glennon
61	6-8 East Water St.	Mr. & Mrs. Arthur Pearse

Key to Sketch Map page 3

62	2-4 East Water St.	Mr. & Mrs. Charles Fucca
63	1-3 Clarendon St.	Mr. & Mrs. Jacques Guiguizian 19 Buttonwood Ave., Haverhill, MA 01830
64	5-7 Clarendon St.	Mr. & Mrs. Dennis George
65	10-12 Clarendon St.	Mr. & Mrs. Peter Lorentz 68 Surrey Dr., No. Andover, MA 01845
66	14 Clarendon St.	Mr. & Mrs. Charles Black
67	25-27 Clarendon St.	Mr. & Mrs. Peter Lorentz 68 Surrey Dr., No. Andover, MA 01845
68	178-180 Water St.	Mr. & Mrs. Hollis Curtis
69	172-174 Water St.	Mr. & Mrs. Kenneth Swasey
70	166-168 Water St.	Mrs. Edna Chamberlain
71	160-162 Water St.	Mr. & Mrs. Raymond Torrisi
72	154-156 Water St.	Mr. & Mrs. James Main
73	155-157 Water St.	Mr. & Mrs. Richard Bauchman
74	148-150 Water St.	Mr. & Mrs. David Petrow
75	142-144 Water St.	Ms. Barbara Eldridge
76	141 Water St.	Mr. & Mrs. John Morrison
77	131 Water St.	Mr. & Mrs. John Wilson
78	125 Water St.	Mr. & Mrs. William Aspinall
79	*73 Water St.	Mr. & Mrs. John Belluardo 21 Lincoln St., No. Andover, MA 01845
80	69 Water St.	Mr. & Mrs. Joseph Vernile
81	61-67 Water St.	J.J. Dwyer, Jr. 610 Prospect St., Methuen, MA 01844
82	52-56 Water St.	Mr. & Mrs. John Donnelly
83	*57-59 Water St.	Arthur A. Murphy, Jr. 22 Beacon Hill Blvd., No. Andover, MA 01845
84	53-55 Water St.	Mr. & Mrs. Charles Breen 35 Merrimack St., No. Andover, MA 01845
85	50 Water St.	Mr. & Mrs. Guy Richards
86	46 Water St.	Mr. & Mrs. Harold Windle
87	40-42 Water St.	Mr. & Mrs. Anthony Mottolo 120 North St., W. Andover, MA 01810
88	36-38 Water St.	Mr. & Mrs. Christopher Healey
89	32-34 Water St.	Mr. & Mrs. John Heimann
90	26-28 Water St.	A.L. McClure 28 Water St., No. Andover, MA 01845
91	22-24 Water St.	Mr. & Mrs. Lucien R. Clermont

12/81

92	16-18 Water St.	Mr. & Mrs. Roland Walker
93	12-14 Water St.	Joanne H. Smith 12 Water St., No. Andover, MA 01845
94	6-8 Water St.	Mr. & Mrs. James McCabe
95	9-11 Merrimack St.	Mr. & Mrs. William Enaire
96	15 Merrimack St.	Mr. & Mrs. Frederick Oakes
97	17-19 Merrimack St.	Mr. & Mrs. Allen Gesing
98	21-23 Merrimack St.	Mr. & Mrs. John Cronin
99	35-37 Merrimack St.	Mr. & Mrs. Charles Breen
100	*12 Garden St.	Mr. & Mrs. Carl Gignac
101	13 Garden St.	Mr. & Mrs. William Morton
102	22 Garden St.	Mr. & Mrs. A. Paradis
103	25 Garden St.	Mr. & Mrs. Edward Maxwell
104	*18 Brown's Court	J.J. Dwyer, Jr. 610 Prospect St., Methuen, MA 01844
105	*20 Brown's Court	J.J. Dwyer, Jr. 610 Prospect St., Methuen, MA 01844
106	27 Church St.	Mrs. Marjorie Carvell
107	30 Church St.	Sandra Garland & Harold Wright
108	32-34 Church St.	Lois M. Borgesi As Guardian for D.G. Abounader 80 Morningside Dr., No. Andover, MA 01845
109	40-42 Church St.	J.J. & Wm. F. Enright 7 Johnson St., No. Andover, MA 01845
110	48 Church St.	Mr. & Mrs. Ralph Thornton
111	54 Church St.	Mr. & Mrs. Yeghsa Giragosian
112	56-58 Church St.	Mr. & Mrs. Edward Kollen
113	59-61 Church St.	Mr. & Mrs. James Murphy
114	64 Church St.	Mr. & Mrs. Joseph Shea
115	10 Elm St.	Mr. & Mrs. Joseph Greco
116	28-30 Elm St.	Effie Donovan
117	33 Elm St.	Mr. & Mrs. Frank Stansell
118	45 Elm St.	Mr. John Cahill
119	34 Elm St.	Mr. & Mrs. James Hilaire, Mrs. Elizabeth Mahoney
120	55 Elm St.	Mr. & Mrs. Harold Page
121	44 Elm St.	Mr. & Mrs. Henry Wilcox
122	46 Elm St.	Mr. & Mrs. Nat Stevens
123	52 Elm St.	Mr. & Mrs. Vaughn Bean
124	59 Elm St.	Beth Stevens/Andy Wheelwright
125	56 Elm St.	Mr. & Mrs. John Crane
126	62 Elm St.	Mr. & Mrs. John Foley

12/81

127	65 Elm St.	Mrs. Shirley Kruschwitz
128	70 Elm St.	Trinitarian Congregational Church
129	69-71-73 Elm St.	855 Realty Trust 91 Quail Run, No. Andover, MA 01845
130	77 Elm St.	Mr. & Mrs. Barry Rumack
131	88 Elm St.	Mr. Frederick Redman, Jr.
132	83 Elm St.	G. Shnellinger
133	94-96 Elm St.	Mr. & Mrs. Raymond Mesiti 15 Richardson Ave., No. Andover, MA 01845
134	93 Elm St.	Mr. Vincent Landers 40 Court St., No. Andover, MA 01845
135	100 Elm St.	Mr. & Mrs. Augustine DeParis 53 Elmcrest Dr., No. Andover, MA 01845
136	Elm St. (Main Office)	Davis and Furber Water St., No. Andover, Ma 01845
137	Elm St. (#1 Machine Shop)	Davis and Furber Water St., No. Andover, MA 01845
138	Elm St. (Cement Bldg.)	Davis and Furber Water St., No. Andover, MA 01845
139	*25-27 Wiley Ct.	Mr. & Mrs. William Smith
140	*30-32 Wiley Ct.	Mr. & Mrs. Joseph Berube
141	10-12 Wiley Ct.	Mrs. Ida Fellows
142	15 Wiley Ct.	Mr. & Mrs. John Shaughnessy
143	26 Bixby St.	Mr. & Mrs. Gilbert Lundquist
144	*22 Bixby St.	Mr. & Mrs. David Hasty
145	15-17 Bixby St.	Mr. & Mrs. Ronald Fountain
146	14-16-18-22 Bixby St.	Mr. Hollis Curtis, Jr.
147	11 Bixby St.	Mr. & Mrs. John Stephenson
148	4-6-8 Bixby St.	Mr. & Mrs. Wilfred Arsenault
149	3-5 Bixby St.	Mr. & Mrs. William Brennan
150	*14 Brown Court	J.J. Dwyer, Jr. 610 Prospect St., Methuen MA
151	*197 Main St.	St. Michaels parking lot Roman Catholic Archdiocese of Boston 196 Main St., No. Andover, MA 01845
152	*39 Merrimack St.	Convent Roman Catholic Archdiocese of Boston 196 Main St., No. Andover, MA 01845
153	*25-27 Wiley Ct.	Mr. & Mrs. William Smith

United States Department of the Interior
National Park Service

Substantive Review

Machine Shop Village
Essex County
MASSACHUSETTS

(DIST)

Working No. 8/3/82-2378

Fed. Reg. Date: 2-1-83

Date Due: 9/30/82 - 10/15/82

Action: ACCEPT 10/14/82

RETURN

REJECT

Federal Agency:

- ☐ resubmission
☐ nomination by person or local government
☐ owner objection
☐ appeal

Substantive Review: ☒ sample ☐ request ☐ appeal ☐ NR decision

Reviewer's comments:

Recom./Criteria AIC / ACCEPT

Reviewer Van Dongel

Discipline A.H.

Date 10/14/82

☐ see continuation sheet

Nomination returned for: ☐ technical corrections cited below
☐ substantive reasons discussed below

1. Name2. Location3. Classification

Category	Ownership	Status	Present Use
	Public Acquisition	Accessible	

4. Owner of Property5. Location of Legal Description6. Representation in Existing Surveyshas this property been determined eligible? ☐ yes ☐ no7. Description

Condition	Check one	Check one
☐ excellent	☐ deteriorated	☐ unaltered
☐ good	☐ ruins	☐ altered
☐ fair	☐ unexposed	☐ original site
		☐ moved date _____

Describe the present and original (if known) physical appearance

- ☒ summary paragraph NOT INCLUSIVE ENOUGH.
☒ completeness
☒ clarity
☒ alterations/integrity
☒ dates
☒ boundary selection JUSTIFICATION IS NOT AS FULL AS IT COULD BE. IT DOES NOT STATE WHAT IS EXCLUDED.

8. Significance

Period _____ Areas of Significance—Check and justify below

Specific dates _____ Builder Architect _____

Statement of Significance (in one paragraph)

- ☒ summary paragraph
- ☒ completeness
- ☒ clarity
- ☒ applicable criteria
- ☒ justification of areas checked
- ☒ relating significance to the resource
- ☒ context
- ☒ relationship of integrity to significance
- ☐ justification of exception
- ☐ other

9. Major Bibliographical References

10. Geographical Data

Acres of nominated property _____

Quadrangle name _____

UNIT References

Verbal boundary description and justification

11. Form Prepared By

12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

____ national ____ state ____ local

State Historic Preservation Officer signature

title _____ date _____

13. Other

- ☒ Maps
- ☐ Photographs
- ☐ Other

ONLY
MAP IS BOUNDARY DESCRIPTION. IT SAYS THAT IT
IS "APPROX." SCALE, BUT IS BASED ON PLANNING MAP AND
THEREFORE ACCEPTABLE.

Questions concerning this nomination may be directed to _____

Signed _____

Date _____

Phone: 202 272-3504

Comments for any item may be continued on an attached sheet



NORTH ANDOVER, MASS.
Machine Shop Village

Kenics Co., Mill Pond Road

View to the north

Photo by Caroline Cole, 1982

Negative filed at North Andover Citizen,

D&F Building, Elm St., No. Andover

Photo 1 of 13



NORTH ANDOVER, MASS.
Machine Shop Village

Davis & Furber, Machine Shop #1, Elm Street (Map #137)
View to the east
Photo by Caroline Cole, 1980
Negative filed at North Andover Citizen,
D&F Building, Elm St., No. Andover
Photo 2 of 13



NORTH ANDOVER, MASS.
Machine Shop Village

Davis & Furber, Office and Card Clothing Building #7,
Elm Street (Map # 136)

View to the northwest

Photo by Caroline Cole, 1980

Negative filed at North Andover Citizen,

D&F Building, Elm St., No. Andover

Photo 3 of 13

Davis & Furber
Office & Card Clothing #7
Elm St



NORTH ANDOVER, MASS.
Machine Shop Village

Yellow Row, #s 6⁸ through 38³⁶ Water Street (Map^s 9A,
View to the northwest 93, 92, 91, 90, 89, 88)

Photo by Caroline Cole, 1980

Negative filed at North Andover Citizen,

D&F Building, Elm St., No. Andover

Photo 4 of 13



NORTH ANDOVER, MASS.
Machine Shop Village

#s 6-8 through 28-30 East Water Street
View to the northeast (Map #561, 60, 59, 58, 56)
Photo by Caroline Cole, 1980
Negative filed at North Andover Citizen,
D&F Building, Elm St., No. Andover
Photo 5 of 13

WATER ST.
BETWEEN ELM &
CLARENDON



NORTH ANDOVER, MASS.
Machine Shop Village

#s 44, 46, and 52 Elm Street (Map #s 121, 122,
View to the north 123)

Photo by Caroline Cole, 1982

Negative filed at North Andover Citizen,

D&F Building, Elm St., No. Andover

Photo 6 of 13



NORTH ANDOVER, MASS.

Machine Shop Village

#s 77 and 83 Elm Street (*Map#s 130, 132*)

View to the north

Photo by Caroline Cole, 1982

Negative filed at North Andover Citizen,

D&F Building, Elm St., No. Andover

Photo 7 of 13



NORTH ANDOVER, MASS.
Machine Shop Village

Church Street, (L to R): #s 30 and 32
View to the north *(Map #s 107, 108)*
Photo by Caroline Cole, 1982
Negative filed at North Andover Citizen,
D&F Building, Elm St., No. Andover
Photo 8 of 13



NORTH ANDOVER, MASS.
Machine Shop Village

Hodges House, 266 Main Street (Map# 25)

View to the northeast

Photo by Caroline Cole, 1980

Negative filed at North Andover Citizen,
D&F Building, Elm St., No. Andover

Photo 9 of 13

GEORGE HODGES HOUSE

266 MAIN ST.



NORTH ANDOVER, MASS.
Machine Shop Village

Wiley Mansion, 93 Elm Street (Map# 134)

View to the northeast

Photo by Caroline Cole, 1980

Negative filed at North Andover Citizen,

D&F Building, Elm St., No. Andover

Photo 10 of 13



NORTH ANDOVER, MASS.
Machine Shop Village

Francis Clark House, 247 Main Street (Map # 22)

View to the southwest

Photo by Caroline Cole, 1980

Negative filed at North Andover Citizen,

D&F Building, Elm St., No. Andover

Photo 11 of 13

FRANCIS CLARKE HSE

247 MAIN



NORTH ANDOVER, MASS.
Machine Shop Village

Blanchard House, 10 Elm Street (Map # 115)
View to the north, ^{west} (In background, L-R:
266 Main Street and 28-30 Elm Street)
Photo by Caroline Cole, 1980
Negative filed at North Andover Citizen,
D&F Building, Elm St., No. Andover
Photo 12 of 13

BLANCHARD HOUSE
10 ELM ST



NORTH ANDOVER, MASS.
Machine Shop Village

Trinitarian Congregational Church, 70 Elm Street
View to the west (Map #128)

Photo by Caroline Cole, 1980

Negative filed at North Andover Citizen,

D&F Building, Elm St., No. Andover

Photo 13 of 13

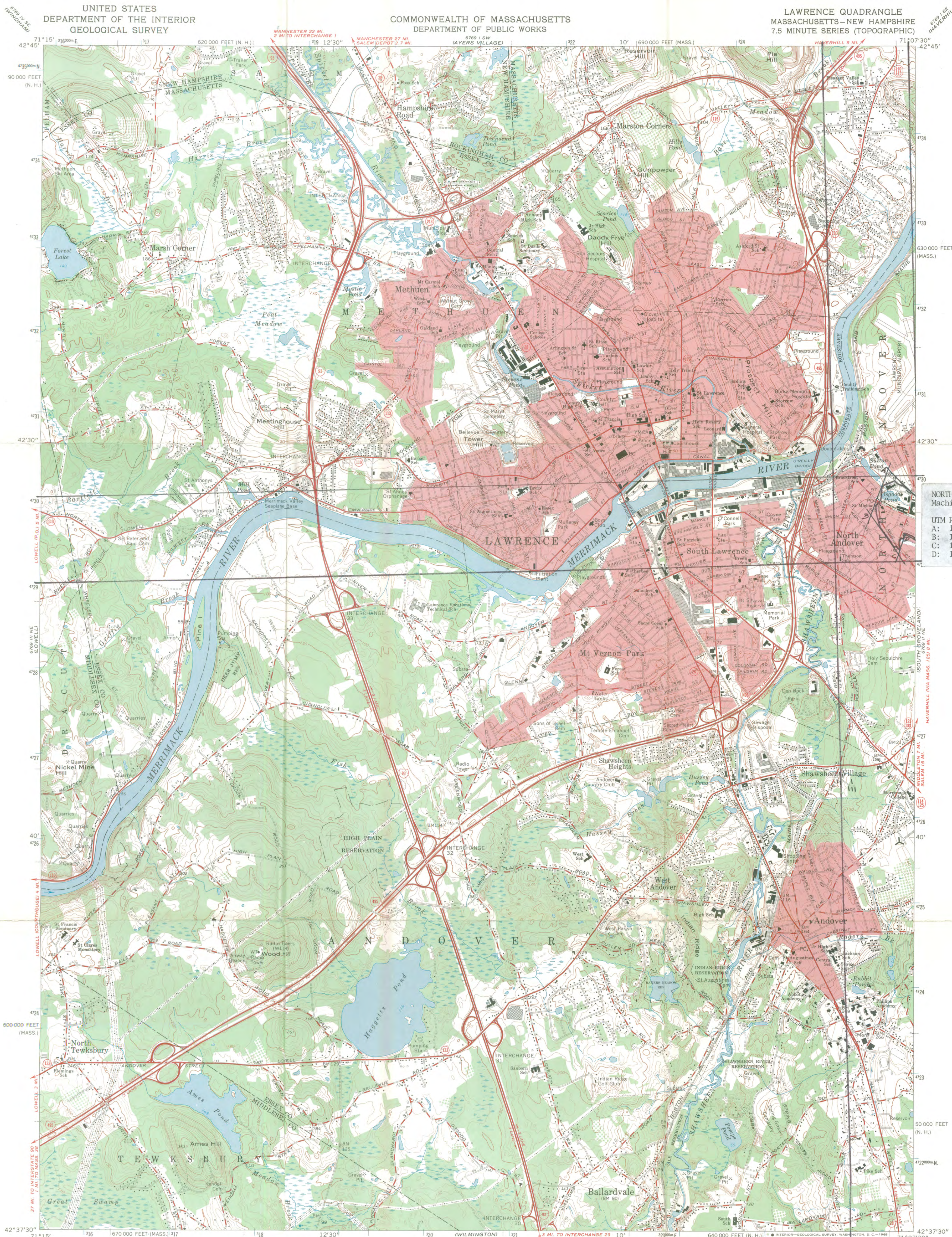
TRINITARIAN
CHURCH

72 ELM



NORTH ANDOVER, MASS.
Machine Shop Village
1" = approx. 400'
Prepared by Martha Larsen,
based on Assessors Maps
1982

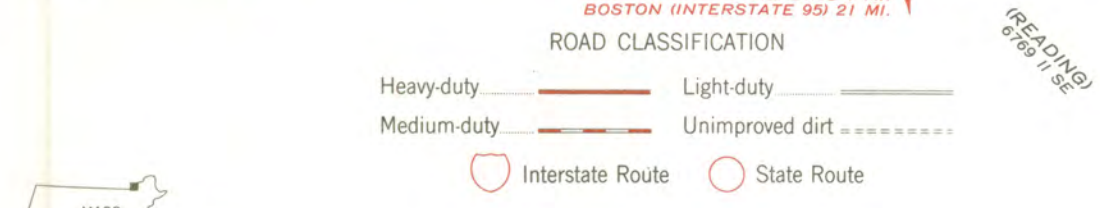
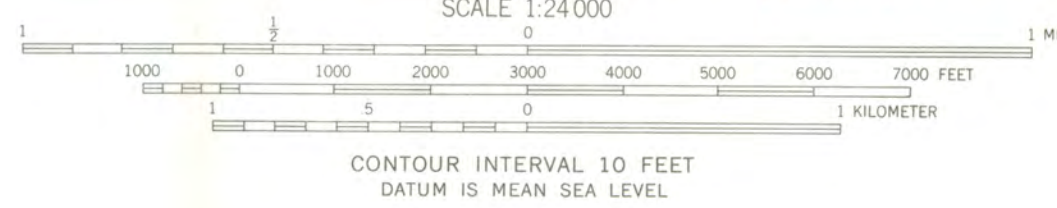
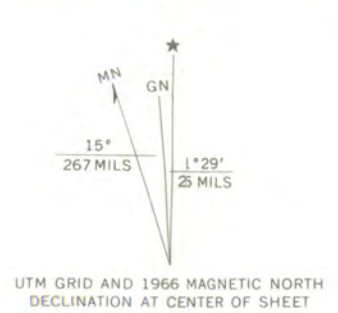
Intrusions are marked with and "X".
Photographs are keyed to map numbers,
located inside the boxes. (Corresponding
street numbers are placed adjacent to
the appropriate boxes.)



NORTH ANDOVER, MASS.
Machine Shop Village

UTM References:
A: 19/325650/4730090
B: 19/325430/4729550
C: 19/325740/4729080
D: 19/325830/4729320

Mapped, edited, and published by the Geological Survey
Control by USGS, USC&GS, and Massachusetts Geodetic Survey
Topography by planetable surveys 1941 and 1942. Revised 1966
Polyconic projection. 1927 North American datum
10,000-foot grids based on Massachusetts coordinate system,
mainland zone, and New Hampshire coordinate system
1000-meter Universal Transverse Mercator grid ticks,
zone 19, shown in blue
Red tint indicates areas in which only landmark buildings are shown



THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, WASHINGTON, D. C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

LAWRENCE, MASS. - N. H.
N4237.5 - W7107.5/7.5

1966

AMS 6769 II NW-SERIES V814

NORTH ANDOVER, MASS.
Machine Shop Village

UTM References:
E: 19/326130/4729120
F: 19/326320/4729410

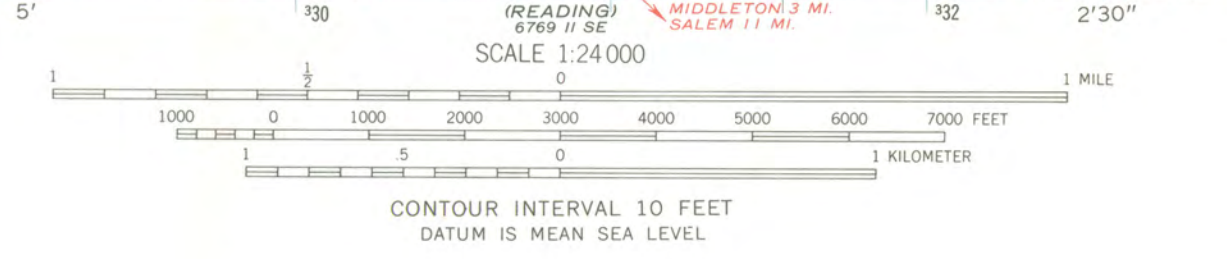


Mapped, edited, and published by the Geological Survey
Control by USGS, USC&GS, and Massachusetts Geodetic Survey
Planimetry by photogrammetric methods from aerial photographs
taken 1939. Topography by planimetric surveys 1942. Revised 1966

Polyconic projection. 1927 North American datum
10,000-foot grid based on Massachusetts coordinate system,
mainland zone
1000-meter Universal Transverse Mercator grid ticks,
zone 19, shown in blue

Red tint indicates areas in which only landmark buildings are shown

UTM GRID AND 1966 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET



ROAD CLASSIFICATION

- Heavy-duty
- Medium-duty
- Light-duty
- Unimproved dirt
- State Route

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, WASHINGTON, D. C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

SOUTH GROVELAND, MASS.
N4237.5—W7100/7.5

1966

AMS 6769 II NE—SERIES V814

BOARD OF SELECTMEN



TELEPHONE 682-6483

RECEIVED

FEB 11 1982

MASS. HIST. COMM.

February 8, 1982

Ms. Wendy Frontiero
Massachusetts Historic Commission
294 Washington St.
Boston, MA 02108

Dear Ms. Frontiero:

The Board of Selectmen of the Town of North Andover encourage your certification of "Machine Shop Village" as a historic district.

For years we have been seeking to revitalize this neighborhood including the residences and the industrial space owned by Davis and Furber. Through the 1981 Block Grant Program, operated by the Office of Community Development, we plan to make funds available for the rehabilitation of structures. The preservation tax incentives now offered by the federal government will allow us to leverage our funds and do more rehab work than possible previously.

As soon as the certification is granted, we can begin preparing the rehab plans for your approval. The benefits to the Town of North Andover will be tremendous in terms of historic preservation, building rehabilitation, and job creation. We urge your approval of this historic district as soon as possible.

Sincerely,

Thomas J. McEvoy, Chairman

TJM:ag

cc: Gayton Osgood
N.A. Historical Commission

Town of North Andover
Office of Community Development
Town Hall
120 Main Street
North Andover, Massachusetts 01845
(617) 687-0705

February 8, 1982

RECEIVED

FEB -9 1982

MASS. HIST. COMM.

Ms. Wendy Frontiero
Massachusetts Historic Commission
294 Washington St.
Boston, MA 02108

Dear Ms. Frontiero:

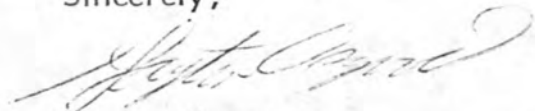
The Office of Community Development, Town of North Andover endorses the certification of "Machine Shop Village" as a historic district.

This old and historic area has been targeted for a commitment of community development block grant funds for the rehabilitation and restoration of residential structures. In addition to this, the Davis and Furber complex is scheduled for complete renovation and new business development leading to the creation of new jobs for the community.

Not only is the certification of "Machine Shop Village" required for historic preservation, but once rehabilitation plans have been approved by the Commission, tax credits up to 25% will be allowed for property owners. This is an important element of our program since this increases the amount of funds available for rehab work.

We urge your approval of this historic district so we may continue with our improvement plans.

Sincerely,



Gayton Osgood
Community Development Director

GO:ag



COMMONWEALTH OF MASSACHUSETTS
Office of the Secretary of State

294 Washington Street
Boston, Massachusetts
02108
617-727-8470

MICHAEL JOSEPH CONNOLLY
Secretary of State

**MASSACHUSETTS
HISTORICAL
COMMISSION**

August 24, 1982

Mr. Jerry Rogers
Keeper, National Register of Historic Places
National Park Service
Department of the Interior
Washington, D.C. 20243

Dear Mr. Rogers:

Enclosed you will find the following nomination forms:

Adams - Phillips Woolen Mill (local)
Adams - Renfrew Mill #2 (local)
Belchertown - Walker Collis House (local)
Hudson - Col. Adelbert Mossman House (local)
Lenox - Lenox Academy (state)
Lenox - The "Church on the Hill" (local)
New Bedford - Dawson Building (local)
New Marlborough - New Marlborough Village Historic District (local)
✓ North Andover - Machine Shop Village (state)
Pittsfield - Wollison- Shipton Building (local)
Rockport - Sewall-Scripture House (local)

All have been voted eligible by the State Review Board and have been signed by the State Historic Preservation Officer. Owners were notified of pending State Review Board considerations 30-75 days before the meeting and were afforded the opportunity to comment. Comments received to date are attached to the nomination forms.

Sincerely,

Candace Jenkins

Candace Jenkins
Registration Director
Massachusetts Historical Commission

Enclosures

CJ/mas

