1987

United States Department of the Interior National Park Service

National Register of Historic Places Inventory—Nomination Form

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

1. Name

historic		WARRENTON	WOOLEN MILL		
and/or common		N/A			
2. Loca	ation				
street & number	r 839) Main Stree	t	N	A_ not for publication
city, town	То	rington N/	A vicinity of		
state	Connecticut	code ⁰⁹	county	Litchfield	code 005
3. Clas	sificatio	n			
Category district Xbuilding(s) structure site object	Ownership public _X_ private both Public Acquisiti in process being conside N/A	Status X oc ui w on Acces ye ered ye	s ccupied noccupied ork in progress sible es: restricted es: unrestricted	Present Use agriculture commercial educational entertainment government X industrial military	museum park private residence religious scientific transportation other:
4. Own	ner of Pro	perty	۲		
name	Neal Ossen	. Trustee in	Bankruptcy	for Margolies, Inc	·
street & number	c/o Ossen a 410 Asylum	and Murphy Street			
city, town	Hartford	N	∠Avicinity of	state	Connecticut
5. Loca	ation of L	egal De	escriptio	on	
courthouse, regi	stry of deeds, etc.	Torringt	on Town Cleri	ς	
street & number		Municipa	l Building,	140 Main Street	
city, town		Torringt	on	state	Connecticut
6. Rep	resentati	on in E	kisting S	Surveys	<u></u>
titleState Reg	ister of Histor	ric Places	has this pro	perty been determined e	ligible? yes _X no
date 1986				federalX sta	te county local
depository for su	irvey records	Connecticut	Historical C	ommission	
city, town		59 South Pro Hartford	spect Street	state	Connecticut

7. Description

1.1.1

Condition		Check one	Check one	
excellent	deteriorated	_X_ unaltered	_X_original s	site
_ <u>X_</u> good	X_ ruins	altered	moved	da
fair	unexposed			

Describe the present and original (if known) physical appearance

Warrenton Woolen Mill is a complex of early 20th-century industrial buildings used until 1984 for the production of woolen cloth. It is set back from Main Street, accessed by a narrow right-of-way that runs between buildings fronting on Main Street. The East Branch of the Naugatuck River passes between the Main Street buildings and the mill property, isolating the mill from its Main Street neighbors, which consist of mixed commercial and residential structures erected over the last 75 years. The Naugatuck Railroad passes to the west of the mill property.

The principal structures are two parallel mill buildings connected by a small one-story infill structure. The east building (see sketch plan) measures about 80' x 340' overall and is two stories in height with a high basement story at the south end. The walls are of brick-pier construction (common bond with Flemish variation; pink mortar), with the cornice corbelling creating deep reveals for the segmental-arched window bays. The wide window openings have stone sills, segmental-arched heads, and paired small-pane wooden sash with fixed lower portions and swing-out transoms. The south part has a flat roof and the north part has a north-facing, sawtooth monitor roof. Above the corbelling is a wooden cornice molding with large carved wooden brackets marking the location of beam ends. The chief decorative feature is the main entrance, which is located in the middle of the east elevation of the east building, facing a narrow driveway which parallels the stream. The double panel-and-glass doors are set within a round-arched opening, flanked by massive battered piers. Above the doors is a transom, outlined by a stepped molding consisting of three courses of molded brick and a band of egg-and-dart terra cotta. A tablet above with the initial "W" gives the plant's date of construction, 1908. There is a round-arched window on the second story.

Interior framing consists of round wooden columns with cast-iron caps, and wooden beams. In the south part, the roof beams are carried on paired steel I-beams, with alternate posts eliminated (an original feature). Floors consist of narrow pine boards laid over layers of planking. The north part on the lower story has a floor partly paved by brick and partly covered over with concrete.

The south part of the east building accomodated carding on the first floor and mule-spinning on the second floor. Weaving took place under the monitor roof on the north part, with cloth finishing on the floor below.

The west building, 44'x280', consists of a three-story, flat-roofed north part with construction similar to that of the east building (except for the use of square rather than round columns), and a south part which is of reinforcedconcrete construction with brick exterior walls. The second story of the

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Description (continued):

north part was used for wool storage and features blank brick walls between piers instead of windows, reflecting its warehouse function. The top story was used for sorting wool. The south part of the west building was the dyehouse. The dyehouse area is a single high story inside. On the roof of the dyehouse are four large sheet-metal ventilator stacks, each of which is centered over a vat pit in the concrete floor, much of which is brick-paved. An enclosed Warren-truss bridge, with members of steel angles, connects the second floors of the east and west buildings at their north ends.

The largest of the detached buildings is the boiler and engine house, 52' x 85', which stands to the southwest of the main mill buildings and is connected to them by a partially underground pipe tunnel. The boiler house is of brick construction similar to that of the larger buildings, with the minor exception that the cornice corbelling is above rather than integral with the secondfloor window heads. It appears as a two-story building but has no interior floor division; it is open inside all the way up to the flat, steel-trussed concrete roof. The entrance has double panel-and-glass doors and a datestone similar to that on the main mill's entry. On the north elevation, near the rear of the building, is a tall circular-plan chimney. At the rear of the boiler house are the remains of a brick and concrete fuel storage building.

South of the mill buildings is the c.1920 two-story brick office building, 45' by 45'. It has a flat roof concealed by a stepped parapet with simple brick paneling. The entrance is in the center of the five-bay facade, sheltered by a gable-roofed porch. Windows have small-pane sash, concrete sills, and soldier-course brick heads. At the north end of the complex are two deteriorated frame buildings, a small board-sided, one-story, gabled-roofed barn used as a wagon shed and a similar two-story barn used as a waste house. Like the fuel-storage building, these were built a few years after the main mill's construction in 1908.

Integrity

The complex retains a high degree of integrity. The main mill buildings are virtually unaltered: windows, panel-and-glass doors, and all other original building fabric is in place. The only structures added after 1915 are the office and a c.1950 loading dock appended to the south side of the infill. The first floor of the south part of the east building has had some steel replacement of its framing. Nothing else has been taken away except for the one storage building, a relatively minor part of the complex.

With one exception, the mill has had all of its shafting and textile machinery removed, though spindles, pulleys, gears, rollers, and other debris remain,

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Description (continued):

especially in the waste house and machine shop, the latter located in the north half of the west building. The boiler house has two large Bigelow boilers in it, as well as a small bridge crane in the front portion, which served as the engine/generator room. Also in the boiler house is a 1936 teasel gig (cloth finishing machine) built by David Gessner Company of Worcester, Massachusetts.

Part of the mill is now vacant and part is used by a woodworking firm.

8. Significance

Period	Areas of Significance-C	heck and justify below		
prehistoric 1400-1499 1500-1599 1600-1699 1700-1799 1800-1899 1900- Criteria	 archeology-prehistoric archeology-historic agriculture architecture art commerce communications A, C 	community planning conservation economics education X engineering exploration/settlement X industry invention	Iandscape architecture Iaw Iiterature Iiterature Iitary IIItary IIIItary IIII IIII IIIII IIIII IIIII IIIII IIIII	e religion science sculpture social/ humanitarian theater transportation other (specify)
Specific dates	1908 - built	Builder/Architect Torri	ngton Bldg. Co./Char	cles T. Main

(engineer)

Statement of Significance (in one paragraph)

Warrenton Woolen Mill is significant in the history of Torrington, where it was an important part of the local economy for 140 years, from the firm's inception in 1844 until its closing in 1984 (Criterion A). Its history goes back even earlier, for Warrenton was a direct successor to the enterprise that established Torrington ds a population center and started it on the road to industrialization. In its origins, scale, and specialized product (highquality cloth for uniforms), Warrenton was typical of the Connecticut woolen industry. The plant also has exceptional significance as a representative and well-preserved example of early 20th-century mill construction (Criterion C). In addition to the typical flat-roof, brick-pier design, the mill includes features uniquely suited to the manufacture of woolens. It was designed by Charles T. Main, the most influential mill engineer of the early 20th century. Main wrote the book (<u>Notes on Mill Construction</u>, Boston, 1886) that codified factory design into a standard format.

History

The production of woolen cloth was started in Torrington in 1813 by Frederick and Christopher Wolcott (Governor Oliver Wolcott was a later investor). Their mill was the only industry in the area, which became known as Wolcottville. The woolen mill was large for its time, employing some 40 workers, and continued in production until 1844, when the company's original mill burned down. One of the partners, John Hungerford, bought the company's undamaged upper mill, and in 1845 he incorporated as the Union Manufacturing Company. Among the early investors were Francis and Ransom Holley of the Salisbury cutlery and iron-manufacturing family. The mill relied on skilled English-born woolen workers such as Samuel Workman, a wool sorter and buyer. Workman and his skilled cohorts were well-paid for their knowledge; by the 1880s ownership of the mill was entirely in their hands. Samuel's son, George D. Workman, later became president of the company. As president of Torrington National Bank and Torrington Electric Light Company, a member of the Board of Burgesses, and a supporter of various charities, he played a prominent role in local affairs.

At first the mill produced black doe-skin cloth, but toward the end of the 19th century it began making the heavy uniform cloth which became its specialty, and fabric for police and military uniforms formed the major part of the mill's output. In 1894 the company changed its name to Warrenton Woolen. The firm moved upstream and built the present plant in 1908, doubling its capacity and incorporating the most modern and efficient layout, including electrical machine drives. The firm continued to produce uniform cloth in the new mill, at one point supplying the uniforms for West Point cadets. Warrenton was in many ways typical of the Connecticut woolen industry. It had the medium-sized scale of operation and specialized product which characterized most of the state's successful mills. It also was typical in its origins, in which capital

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Significance (continued):

from mercantile pursuits and metal-related industry was combined with imported English expertise.

Architectural Significance

Warrenton Woolen Mill embodies the distinctive characteristics of early 20thcentury mill construction. In its wall construction, the form of its windows and roof, and its structural framing, it represents the most mature form of the multi-story brick mill, a form that would soon be superseded by reinforced concrete. Insurance considerations and the professionalization of mill engineering combined to produce a standard type of industrial structure that was believed to be functional, fire-resistant, and economical to build and operate. Brick-pier construction (with segmental-arched windows), which saved material by combining load-bearing pilasters with curtain-wall window bays, had achieved virtually universal application by the mid-1870s. Roof pitches were made progressively shallower in the second half of the 19th century, due to concerns over fire hazards, the marginal usefulness of attics, and better roofing materials. Interior framing of heavy wooden posts and beams continued in use because of the its lower cost relative to metal members. Floors of layered planks, which eliminated the use of highly flammable joists, were first introduced in the 1830s, and they remained a part of mill construction until the introduction of reinforced-concrete slabs.

While representing a century of refinement in factory architecture, Warrenton also illustrates techniques that were innovative in their day. The use of steel I-beams to carry a portion of the roof of the east building differed from the standard practice. The strength of steel allowed double the span of wooden beams, creating more open floor space by eliminating every other post. Another innovation was the reinforced-concrete structural system in the dyehouse, which provided ample bay spacing and a rigid frame for the high-story open interior. Concrete also offered better resistance than wood or exposed metal to the high temperatures and corrosive chemicals used in dyeing.

The mill has several specialized features which are directly related to woolcloth production; these variations on standard construction enhance the complex's significance as a historic resource which recalls Torrington's woolen industry. The most prominent example is the sawtooth roof over the part of the building which was used for the critical weaving process. The monitors offered superior light because they illuminated the entire width of the floor, and because their northern exposure provided even light that did not vary in intensity or direction during the daylight hours.

The mill's designer, Charles T. Main, for the most part dispensed with architectural ornament. Unlike the ornate mills of the 19th century, Warrenton's



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Significance (continued):

only stylistic embellishment is around the main entrance. Main did not ignore aesthetics, but rather interpreted beauty as the product of utility. Main articulated this functionalist aesthetic as early as 1886, a generation before it came to America under the imprimatur of the Bauhaus school:

If we fulfill the two fundamental principles [of] adaptability and stability, we shall have true architectural beauty. . . . Strength and stability should be characteristic of a mill building. There should be nothing shown apparently useless, and true decoration shows nothing which is not useful; it is simply a higher finish of useful parts. There should be a similarity of portions used for the same purpose, and symmetry in the assemblage of these parts. . . . We may combine utility, strength and economy with taste and judgment, and obtain a result which will be pleasing, and fill us with that feeling of satisfaction which we have attributed to beauty.

Main was the most prolific mill engineer of his day. After graduating from the Massachusetts Institute of Technology in 1876, he worked as engineer for Manchester Mills in New Hampshire and then for the Lower Pacific Mills in Lawrence, Mass. Among other contributions, Main designed standard wall modules (pilasters surrounding window panels) that could be multiplied to make a mill of virtually any required size. After opening a consulting engineering firm in 1893, Main designed dozens of textile mills and power plants in New England, the Midwest, and the South. In 1906-07, he designed American Woolen Company's Wood Worsted Mills in Lawrence, Mass., the largest brick mill in the country at the time of its completion. Thus the 1908 Warrenton Woolen Mill illustrates the work of this most influential designer at the time when his work on brick structures reached its most highly evolved form. It is the only mill in the state that is known to be the work of Charles T. Main.

Notes

- 1. Charles T. Main, Notes on Mill Construction. Boston, 1886; pp.6-7.
- 2. Ibid., pp.4-5, 25.
- 3. Chas. T. Main, Inc., Main Milestones. [Boston, 1968]; pp. 5-11.
- 4. A search of <u>Connecticut: An Inventory of Historic Engineering and</u> <u>Industrial Sites</u>. Washington, D.C., 1981, revealed no other mills attributed to Main.



9. Major Bibliographical References

See continuation sheet

10. Geo	ographica	al Data				
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state	·····	code	county		C	ode
state		code	county		с	ode
11. For	m Prepai	red By	····			
name/title	Bruce Clouet	te and Matth	ew Roth, par	edi tners, Nat	ted by John H ional Registe	Herzan, er Coordinator
organization	Historic Reso	ource Consul	tants	date Aug	ust 12, 1986	
street & number	55 Van Dyke 1	Avenue	•	telephone	(203) 547-0	268
city or town	Hartford	-		state	Connecticut	
12. Sta	te Histor	ic Pres	ervatio	n Offic	er Certi	fication
The evaluated sig	nificance of this pro	perty within the	state is:			
	_ national	state	X local		•	
As the designated 665), I hereby non according to the o	State Historic Pres ninate this property riteria and procedu	ervation Officer for inclusion in t res set forth by t	for the National H he National Regi he National Park	listoric Preser ster and certify Service.	vation Act of 1966 y that it has been o	(Public Law 89– evaluated
State Historic Pre	servation Officer sig	nature	My in	_ fle	und	
title Director	r, Connecticut	Historical	Commission '		date Januar	y 8, 1987
For NPS use of I hereby cer	inly tify that this propert	y is included in t	he National Regi Intered 1 National 1	ster 2 520 Rherister	date Z-	12-87
Keeper of the	National Register	<i>f</i>	<u>nautumet</u>			
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Chief of Regis	tration					

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