

# The Howland Mill Village:

## A Missing Chapter in Model Workers' Housing

*Between the rigid social and visual order of early factory workers' housing and the large-scale speculation that later created the triple-decker, a generation of capitalists and planners envisioned a less paternalistic scheme that melded the garden suburb and the mill. New Bedford's Howland Mill Village put in place a different relationship between capital and labor—and, had its parent corporation survived the financial crisis of the 1890s, might well have set workers' housing on a radically different course.*

**N**ew Bedford, Massachusetts—like her sister textile communities of Lowell, Fall River, and Lawrence—is a city of three-decker flats. Here, long street vistas of wooden multifamily housing are linked visually and conceptually to the powerful presence of a red brick mill that characteristically terminates the block (fig. 1). During the second and most productive phase of New Bedford's textile era (from about 1901 to 1925), the three-decker became the most common form of urban housing for the largely unskilled labor force of the textile industry. By 1930, two- and three-deckers comprised 41.3 percent of New Bedford's

housing stock; 64.2 percent of the city's population lived in dwellings designed for two or more families.<sup>1</sup>

While this physical relationship of a textile mill flanked by rows of multifamily housing made New Bedford a "typical" New England industrial landscape in the first quarter of the twentieth century, there was a brief moment when industrial and community planning in the region could have been set on a very different course. Between 1888 and 1899, the short-lived Howland Mill Corporation offered its workers the option of either renting at reasonable rates architect-designed model housing (fig. 2) or purchasing building sites through a cooperative ownership housing arrangement. The single-family workers'

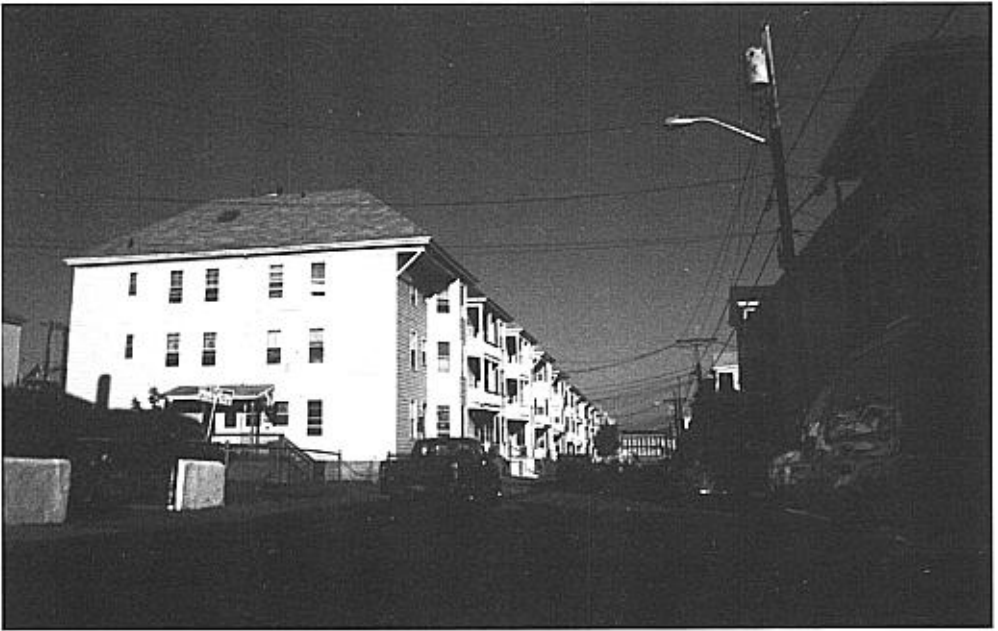


Fig. 1. *These three-deckers line North Front Street, which ends at the former Nashawena Mill B on Belleville Avenue in New Bedford's North End. Photograph 1995 by Kingston Heath.*



Fig. 2. *The Howland Mill Village, 1996. The three workers' cottage designs are all visible at left. The contour plan, the irregular placement of the cottages, the wide streets with granite curbs, and the trees lining the sidewalk are all original design features. Photograph by Kingston Heath.*

housing was augmented by a curvilinear suburban plan, while additional “breathing places” were provided by generously proportioned, tree-lined streets. Space was also set aside for a proposed communal park that, had it been created, would have been part of a continuous chain of city parks and scenic parkways. These naturalistic planning elements were to provide the setting for an envisioned eight-mill, state-of-the-art, spinning mill complex connected to a transportation network of new macadam roads and an electric rail system.

In their desire to link technology and nature, as the earlier industrial planners of Lowell had sought to do, Howland Mill organizer William D. Howland and the newly established Boston architectural firm of Wheelwright and Haven provided their own progressive vision for an urban industrial utopia. Their creative synthesis of enlightened social policies, modern technological processes, and the pastoral ideal of the garden suburb tradition resulted in what was probably the first picturesque workers’ housing designed and built as part of an industrial master plan in the United States. At the very least, the Howland Mill Village was among a select number of late nineteenth-century experiments that influenced the renewal of progressive company housing and naturalistic industrial planning in the first quarter of the twentieth century. Further, the plan for the village differed critically from the paternalistic visions put forth earlier in New England, and in this regard the story of the village provides essential specifics for understanding the broader picture of workers’ housing in the region. Its evolution traces not only the

transition from company-built to speculator-built housing that ultimately brought the three-decker to New Bedford but also chronicles how ideas about laborers’ housing had changed as the nineteenth century came to an end.

#### THE HOWLANDS IN NEW BEDFORD

William Dillwyn Howland (fig. 3) was born in New Bedford on March 27, 1853. The son of Matthew and Rachel Howland, he was part of a prominent Quaker family who, with a handful of other elite in the city, controlled the whaling industry, the emerging textile industry, banking, and, very often, local government. His grandfather, George Howland, was among New Bedford’s earliest whaling merchants and the first president of the New Bedford Commercial Bank (later the National Bank of Commerce). His father Matthew (1814–84) and uncle George (mayor of New Bedford from 1857 to 1860) continued the family’s involvement in the whaling industry until uninsured losses of its Arctic whaling fleet in 1871 and 1876 compelled them to begin selling their remaining ships in 1881.<sup>2</sup> In addition, Howland was a close business associate of William Wallace Crapo, president of New Bedford’s first textile concern, the Wamsutta Mills (1846), and a director of its second, the Potomska Mills (1871), and of William J. Rotch and his son Morgan, both one-time mayors of the city. William J. Rotch also served on the board of directors of Wamsutta and Potomska mills in 1889.

That a small group of people held unusual control over New Bedford’s wealth and how it was allocated helps to



Fig. 3. *William D. Howland in his senior year at Brown University, from Catalogue of the Officers and Students of Brown University (1873–74). Courtesy John Hay Library, Brown University.*

explain how Howland could achieve his detailed urban plan with such mechanistic efficiency.<sup>3</sup> Within an otherwise conservative business atmosphere, Howland was able to carry out his progressive ideas in large part because he could rely on a close network of influential associates for support. The complex plan for his mills and workers' village—involving a wide range of planning issues from parks to trolley lines, from water and sanitation systems to progressive housing and modern thoroughfares—was able to proceed as a coordinated effort between business and government with relatively little bureaucratic intervention. Until municipal agencies appeared in New Bedford and other cities toward the end of the nineteenth century, urban-industrial

planning, in the modern sense of the term, was often the end result of private business development.<sup>4</sup>

Little direct documentary evidence establishes Howland's specific role in the design of his mills and mill village,<sup>5</sup> but enough is known about his background to suggest why he in particular would implement a progressive worker housing plan where and when he did. Howland's parents were lifelong leaders in the Society of Friends long after many prosperous New Bedford Quakers had become Unitarians or Congregationalists; his father served as an elder and a clerk of the New Bedford Monthly Meeting for approximately thirty years. The family was particularly active in philanthropic work. In 1870, Matthew Howland donated

for public use an interdenominational chapel to serve the workers in the industrial North End where the Wamsutta Mills had been established in 1846. Such gestures of social concern cast an eye towards business and civic interests by attempting to create a layer of moral supervision in workers' living areas, but they also suggested a peculiar brand of enlightened, ethical capitalism.

Howland's grandmother and mother also played significant roles in the public sphere. His grandmother, Susan (Howland) Howland, had been a staunch antebellum supporter of abolition, prison reform, and education and aid to the Indians, as well as a proponent of the more equitable distribution of property. His mother, Rachel

Collins Smith (1816–1902), was born into a leading Quaker family in Philadelphia and was a minister at Friends meetings for fifty-five years. Like many influential women in her day, she was active in such philanthropies as the City Mission, the Association for the Relief of Aged Women, and the Children's Aid Society.<sup>6</sup> But, unlike other prominent women in New Bedford, her social convictions extended to labor issues as well. In 1867, Rachel Howland served as a mediator when English skilled workers at Wamsutta Mills struck for a ten-hour work day, and she was instrumental in reaching a peaceful settlement.<sup>7</sup> According to a family relation, she viewed the well-known English social reformer Robert Owen as a hero for having bought up, with his partners, the spinning mills of New Lanark in Scotland and turning them into a model factory. This famous social experiment introduced modern machinery, reasonable working hours, good wages, healthy living accommodations, and a school near the factory.<sup>8</sup>

William D. Howland had not only the predisposition to investigate enlightened attitudes toward industrial labor but the business training and opportunity to do so as well. Even though his father's whaling fleet was largely destroyed in the Arctic during the 1870s, when Howland had entered the business after his graduation from Brown University, he was able to turn his professional ambitions to New Bedford's burgeoning textile industry as, initially, a clerk at Wamsutta Mills by the end of that decade.<sup>9</sup> By 1874 Wamsutta had realized a 300 percent profit on its original investment twenty-five years earlier, which proved the

potential of cotton manufacturing in the city.<sup>10</sup> In five years at Wamsutta and four months at Potomska mills drawing mill plans for new machinery, Howland established a firm business and technical knowledge of the textile industry, which he supplemented during the winter of 1881–82 with several months of travel to research cotton yarn manufacture.<sup>11</sup>

By the time Howland returned to New Bedford, it was evident from the rapidly growing number of weaving mills in the city that a high market demand for quality yarn existed. In March 1882, at the age of twenty-nine, he organized the New Bedford Manufacturing Company, raised a capital stock of \$125,000, and became the company's treasurer. After the first yarn was shipped in January 1883, investors realized that the demand for fine grades of yarn was greater than the single mill could supply. A second mill was built in the spring of 1886, a combing department was soon added to refine the spinning process, and in less than four years capital investment had increased to five hundred thousand dollars.<sup>12</sup> This venture demonstrated Howland's business credibility and the strength of his influence and connections, all of which he could bring to bear to see a large industrial project through to a profitable end, and to realize his vision of enlightened industrial capitalism in the Howland Mills complex.<sup>13</sup>

#### THE HOWLAND MILLS

In 1886, just as his New Bedford Manufacturing Company was expanding, Howland, Morgan Rotch, and two other company officers organized the Howland

Mills Corporation to supplement the city's existing spinning capacity. Howland as treasurer, company president William J. Rotch, and other investors purchased approximately 120 acres of land that had once been part of the estate of Cornelius Howland, Howland's maternal great-uncle, and two other contiguous parcels that had most recently been farm and nursery land.<sup>14</sup> The large tract lay along the western head of Clark's Point, which jutted into the ocean just west of New Bedford's harbor and was the southernmost extension of the city (fig. 4).

Before 1871, Clark's Point was largely rural, the site of a wide pleasure drive, a handful of summer cottages on large lots, such municipal institutions as the work farm, hospital, almshouse, and orphans' home, a few, scattered businesses, and, at its tip, the federal government's Fort Rodman. With the construction of the Potomska (1871 and 1877) and Acushnet mills (1883 and 1887) in the South End along the western shore of the Acushnet River, this wooded area began to be transformed into an industrial landscape. Between 1871 and 1875, city engineers had blocked out land the Howland Mills would later purchase, between Bolton Road and Orchard Street, for large mills separated by three numbered "Mill Roads" (fig. 5).<sup>15</sup> In effect, the city government had already zoned the South End for industrial development,<sup>16</sup> and the incorporators of the Howland Mills anticipated considerable growth as part of that transformation. "The idea of the purchase of so large a tract of land," the company stated in 1889, "was that the company might profit from the

certain advance in the value of real estate in the vicinity of the mill."<sup>17</sup>

The first two factories of the Howland Mills were constructed between Cove Road and what was designated Mill Road 2. The first building, four stories high, took only three months of 1888 to build and was fitted with maple floors, steam pipes, and "Edison wires" (fig. 6).<sup>18</sup> By 1891, two more mills and another picker house had been added to create a symmetrical massing between the two mill complexes.<sup>19</sup> Beginning in 1892 Howland organized and had constructed two additional mills between Mills Road 3 and 4 for the Rotch Spinning Corporation, which, with forty-two thousand spindles, manufactured hosiery yarns.<sup>20</sup> Though technically a separate corporation, Howland viewed the Rotch Spinning Corporation as just another component of what he envisioned as an eight-mill industrial complex—two mills on each of the four mill parcels that, all told, would employ about 1,200 operatives. Aesthetically, this modern, thoroughly equipped factory complex was given the historical bearing of a medieval castle with its corbeled brick and crenelated towers (fig. 7); its medieval associations set against a picturesque, still largely rural, seaside landscape suggest a response to what English critic John Ruskin termed "the dehumanizing, soul-destroying tasks of modern production."<sup>21</sup>

Yet the Howland Mills was the first textile concern in New Bedford to choose an inland location away from the Acushnet River and remote from existing housing and transportation. In order to induce workers to choose this mill over others, its

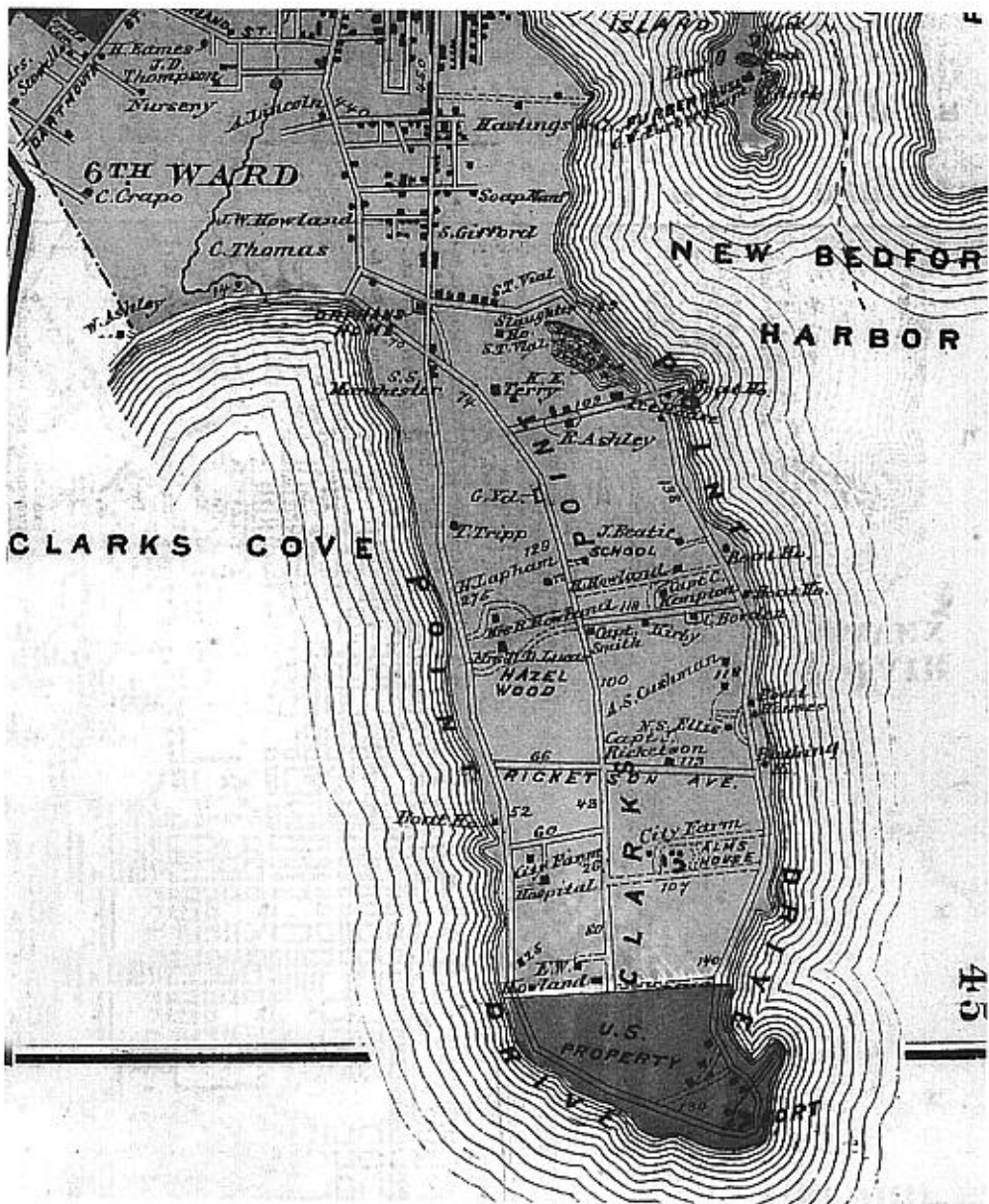


Fig. 4. This detail of New Bedford's South End in 1871 shows the site the Howland Mill complex would occupy, principally the W. Ashley, C. Crapo, and J. W. Howland/C. Thomas parcels, all undeveloped at the time. Along the Point Drive was the 1840s cottage of Rachel Howland (purchased by the family in 1865), numerous municipal institutions and public bathing facilities, and the federal property occupied by Fort Rodman at Clark's Point. The tidal Acushet River, at right, was (and is) the site of the city's harbor. Detail from Beers' Atlas of Bristol County, Mass. (1871); reproduction courtesy New Bedford Free Public Library.

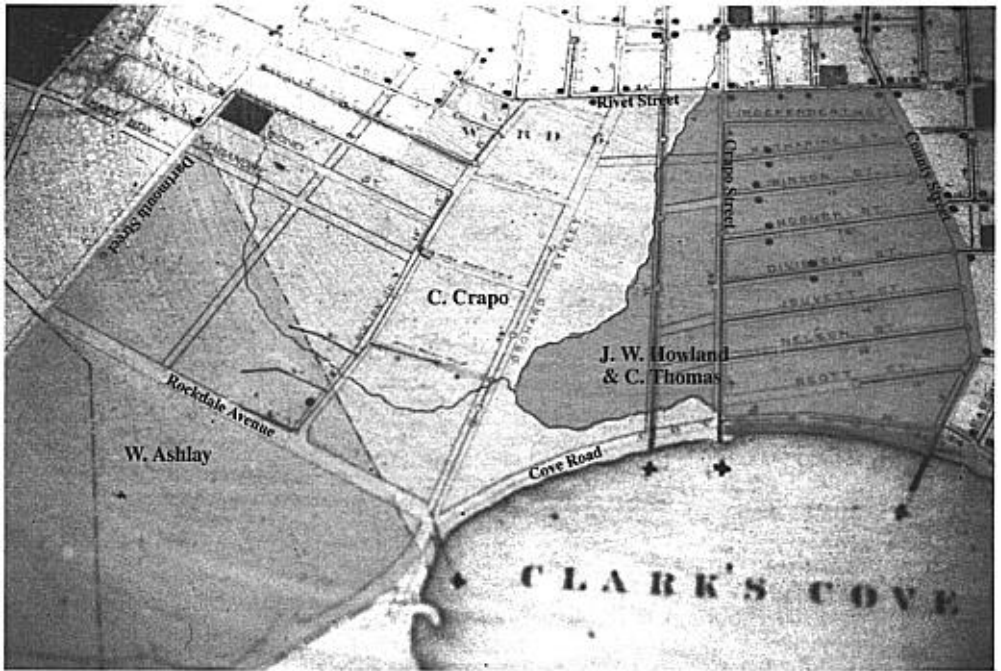


Fig. 5. This computer-enhanced detail of the 1875 city engineers' map shows the parcels purchased for the Howland Mills Corporation as well as Mill Roads No. 2, 3, and 4 laid out on the Crapo parcel, once part of the estate of Cornelius Howland. *Engineering Survey Map of New Bedford (New Bedford: Wheelwright and Coggeshall, 1875); reproduction courtesy New Bedford City Hall.*

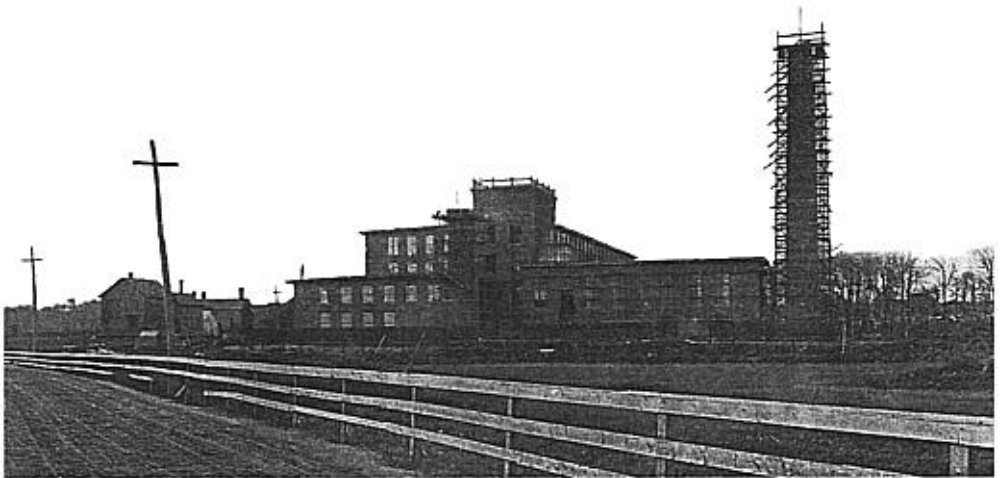
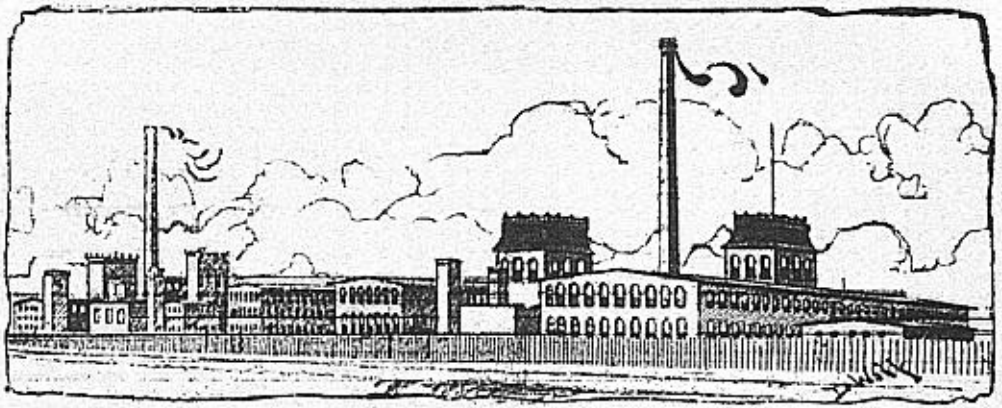


Fig. 6. Howland Mill No. 1 under construction as seen from Cove Road, 1888. The brickwork took only seven weeks to complete. Rising up from a rural landscape and overlooking Clark's Cove are the gable-end superintendent's house at left, the two-story picker house (where metal machines removed pebbles from raw cotton) in the foreground, the four-story mill and stair tower in the background, and the engine house at right. Photograph in William D. Sayer, ed., *New Bedford (1889); reproduction courtesy New Bedford City Hall.*



THE HOWLAND AND ROTCH MILLS.

Fig. 7. A drawing of the Howland (left) and Rotch mills was published in *New Bedford's Morning Mercury* on April 24, 1897. By 1892, the Rotch Mill stair towers had been capped with mansard roofs, which distinguished the corporations as separate entities. Courtesy New Bedford Free Public Library.

planners sought to address both shortcomings with an integrated social and technological scheme. The newspapers of Howland's day gave him almost sole credit for the highly sophisticated industrial plan, but in fact it melded Howland's ideas with the ideas and skills of architects similarly immersed in progressive planning at the time, including the Boston-area firms of Wheelwright and Haven and Frederick Law Olmsted, who likely were in charge of the residential sphere of the master plan.

Howland turned to the housing concerns as Mill No. 1 was being planned and constructed in 1888. He commissioned the newly formed partnership of Wheelwright and Haven to design a village of operatives' housing amidst a series of wide, curvilinear streets on a gently sloping hillside immediately west of the factories.<sup>22</sup> Edmund March Wheelwright (1854–1912) was only thirty-four years old when he and Parkman Balke Haven un-

dertook the New Bedford project as one of the firm's first, yet he had already amassed impressive architectural experience. After graduating from Harvard in 1876, he began his training in architecture with a year's study at MIT (1876–77) and then worked as a draftsman with the prominent Boston firm of Peabody and Stearns. Firm principal Robert Swain Peabody was a New Bedford native, closely identified with various projects of municipal improvement, and head of the Boston City Park Department. Both Peabody and Stearns and McKim, Mead and Bigelow in New York, for whom Wheelwright also worked, distinguished themselves during the 1880s with a large number of fine suburban homes and country estates in the "modern-colonial" style. Wheelwright's training in these firms is apparent in the Shingle Style cottages and picturesque planning of the Howland Mill Village.<sup>23</sup>

By early October 1889, the *New Bedford Evening Standard* reported, twenty-five of a planned forty “cottage tenements” had been built next to the Howland Mills “for separate families and of better style than other corporation tenements in Bristol County.” The newspaper went on to reveal the intent behind the model village:

The houses are in three different styles, but all differing more or less in details of dormer windows, form of roof, and other semi-ornamental features. The roads in the mill village are slightly winding, and the houses are more or less irregularly placed, so that the general look is anything but that of the ordinary machine made village.

Most of the houses contain a dining or sitting room, a kitchen, pantry, five bedrooms

and a bath room. Every house contains a bath tub. . . . The company manufactures the finest quality yarns, and to do this is obliged to hire the best and most intelligent class of operatives. To get and secure them, [low rent is part of the] liberality of the corporation in providing pleasant quarters, and [the corporation] second their[*sic*] efforts by providing neat furniture, and in some cases handsome flower gardens.<sup>24</sup>

Initially, only three streets of the larger residential site were developed (fig. 8), but by the end of 1889 the village featured fifty single-family houses, a large, gambrel-roof boardinghouse for bachelors (fig. 9), and a superintendent’s house.<sup>25</sup> Thirty-five of these cottages were of a gambrel-roof, central hall form consisting of seven rooms excluding the pantry (fig. 10). The remain-

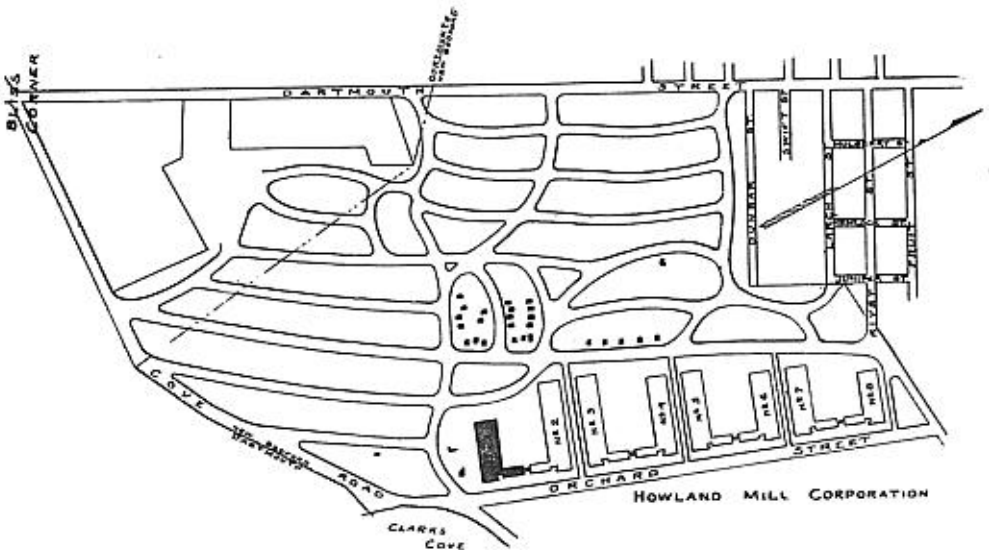


Fig. 8. The curvilinear plan of the Howland Mill Village as Howland and his architects conceived it was published in the 1889 history of New Bedford, by which time twenty-six houses, Mill No. 1, and the mill superintendent’s house and stables were under construction. By 1895, however, workers’ housing occupied only those spaces where it was shown on this earlier plan and on the triangular site just above them. Reproduction courtesy New Bedford City Hall.

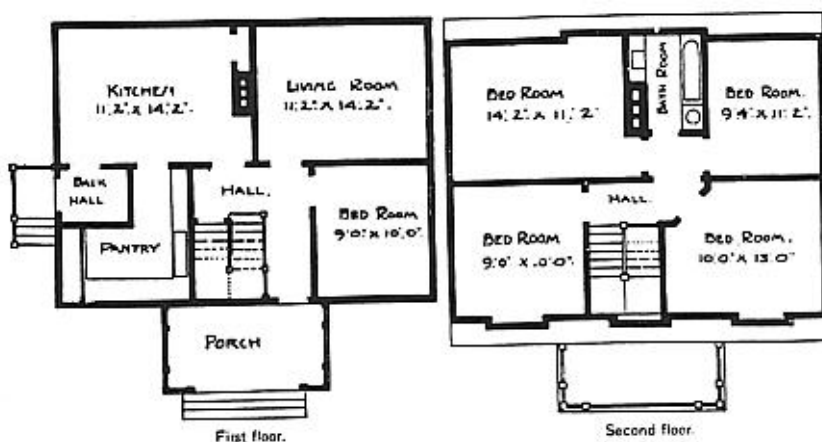


Fig. 9. *The men's boardinghouse at Howland Mill Village as it appeared about 1920. The dwelling cost thirty-six thousand dollars to build. Single male mill operatives paid between four dollars and four dollars and fifty cents for board and another dollar for five meals. Photograph in Jessamine Whitney, Infant Mortality, a U.S. Department of Labor report published in 1920.*

ing fifteen were smaller hip-on-gable or gable-front cottages with five rooms on two stories. The houses' massing and orientation varied; occupants entered either through the side or through the gable end. The smaller cottages, which cost one thousand dollars each to build, rented for \$8.50 per month. The larger dwellings cost two thousand dollars each to construct and rented for ten dollars per month generally to spinners, skilled workers whose wages averaged sixteen dollars a week in 1895.<sup>26</sup> Most tenants thus paid fifteen percent of their earnings for rent, and because rents were deducted weekly from wages earned the company lost nothing from rents being in arrears.<sup>27</sup>

In the Dutch Colonial houses, a columned porch opened into a stair hall, and a bedroom was designed into the first-floor

plan to serve as an optional space for a boarder. Most of the cottages were also offset on their lots, which accented their informality compared to the more spatially constricted corporation housing earlier New Bedford textile mill owners had built for their employees (fig. 11). In addition, the houses occupied lots large enough for a rear laundry yard and a front garden, both thoughtfully oriented to allow access from the cellar laundry tub and food storage areas. The cottages' interiors were also designed with care. The space designed for the cooking range was just below the second-floor bathroom, whose wall overlapped the kitchen's interior wall for the heat advantage. The cottages were each equipped with a flush toilet, a bathtub, hot and cold water, and a marble washstand. The principal rooms were wallpapered. Such appoint-



HOUSE OF HOWLAND MILLS CORPORATION, NEW BEDFORD, MASSACHUSETTS.  
PLAN NO. 54.

Fig. 10. Thirty-five gambrel-roof cottages on this Wheelwright and Haven plan were built in the mill village. Engraving in E. R. L. Gould, *Housing of the Working People* (Washington, 1895). Courtesy Library of Congress.

ments were rare in workers' housing—indeed, in most housing—in the 1880s.

The design scheme for the mill workers' village also featured sophisticated concepts of reform housing architecture,

sanitation, and suburban landscape design. At considerable expense, the Howland and Rotch mills had installed brick sewers through the unstable soil conditions around the salt marsh. According to the city's

Board of Public Works, the sewer needed a stone and cement foundation and required fourteen hundred tons of stone.<sup>28</sup> The Howland Mill Corporation also laid out and graded a road sixty feet wide and then offered to pay for building gutters on each side of it if the city Board of Public Works, upon accepting the road, would macadamize it. The board applauded the corporation's "generous spirit" and noted its "pleasing contrast to the demands sometimes made on this department."<sup>29</sup> These street improvements in the immediate vicinity of the new mill complex prompted the city to provide additional access roads to the Howland Mill that in effect joined it to the city's street grid.<sup>30</sup>

Howland specifically requested mac-

adam for his mill roads, for its even surface was found to be easier on horses' feet and carriage wheels alike; macadam was just becoming a preferred paving surface in American suburbs and parks during the 1890s due particularly to the influence of the bicycle recreation movement.<sup>31</sup> The wider streets in the Howland Mill Village also lessened the congestion of commercial traffic while creating, in concert with the tree-lined village thoroughfares and a proposed park adjacent to the factories (fig. 12), what Olmsted had termed "breathing space." Together, these landscape features offered relief both to the mill worker and urban citizen from the otherwise predictable industrial realities of noise, congestion, and factory stench.



Fig. 11. Workers' housing for the Grinnell Manufacturing Company, established in 1882, lined what is now Ashley Boulevard in the city's North End. Courtesy New Bedford Standard-Times.

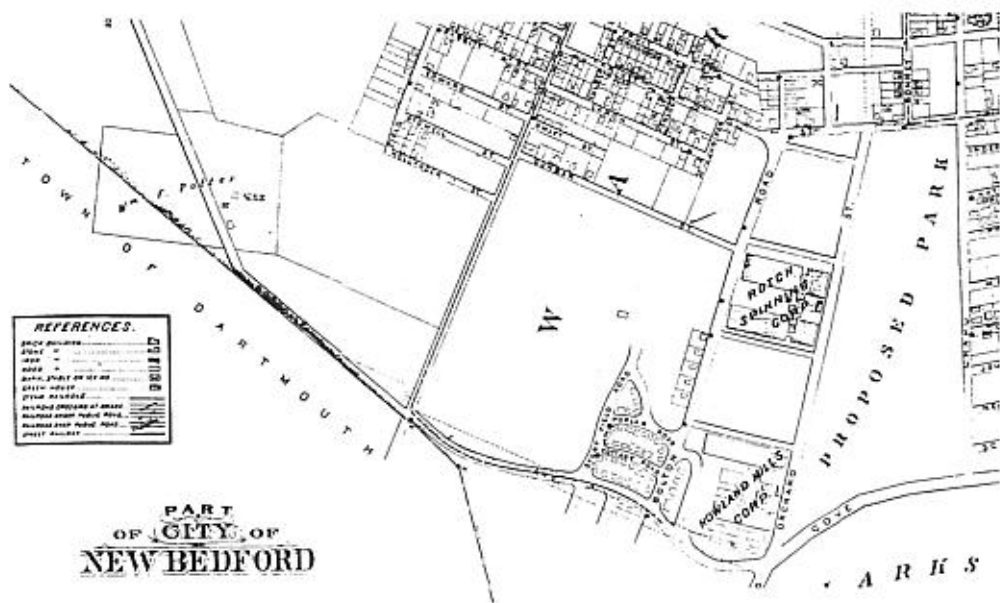


Fig. 12. Cove Park, which Howland planned across from the Howland and Rotch mills, is shown as “proposed park” on one of the New Bedford plates in an 1895 Bristol County atlas. With the exception of the payroll office constructed in 1898 at the corner of Cove Road and Orchard Street (now the city’s Portuguese-American Club), this plate shows the furthest extent of what was envisioned as an eight-mill complex. Plate 3, Atlas of Surveys, Bristol County, Mass. (Philadelphia: Everts and Richards, 1895); reproduction courtesy New Bedford City Hall.

At the same moment that the sewer and road systems were reaching completion, the city’s Union Street Railway was expanding its service to the Howland Mill Village. The idea of extending rail service in conjunction with the ongoing mill construction was discussed as early as 1889, when Morgan Rotch served on the city’s Board of Public Works, and by 1894 the railway, again assisted by Rotch as a member of the Transportation Commission as well as of the Howland Mills board, had been extended to the mill complex.<sup>32</sup> Howland Mill operatives who did not want to live in the village or wanted to shop in the city center could now easily do so; the railway stopped at the foot of Bolton Street

and Rockdale Avenue, where the factories and cottages met. The original remoteness of the Howland Mill site was no longer an obstacle; in fact, the housing was now exceptionally convenient both to work and (with connections to the Globe Street Railway) to outlying commercial and recreational offerings. So strikingly different was the Howland Mill Village that the 1895 *New Bedford City Directory* listed it among “additional places of interest” as a “very creditable village of mill tenements, conveniently arranged and of neat design.”<sup>33</sup>

The Howland Mill Village was something of an anomaly in Wheelwright’s career. His family paper manufacturing and printing business had exposed him to in-

dustrial facilities, and his business ledger indicates that he designed a boardinghouse during the 1880s for Richmond Paper Company.<sup>34</sup> But until his term as Boston City Architect from 1891 to 1895, little architectural evidence exists of his commitment to social reform.<sup>35</sup> Despite Wheelwright's training under architects who were well aware of progressive housing trends, it seems likely that the notion of model workers' housing was prompted more directly by Howland's labor management philosophy as well as by the need amid growing competition to attract the most highly skilled of the city's industrial labor force.

Wheelwright's more fundamental contributions to the village were probably its municipal improvements, for which his work was praised in its day, and its aesthetic qualities, of which too little was said. The markedly picturesque qualities of the cottages, their siting, and the neighborhood of winding roadways seems to recall Robert Swain Peabody's work in the Boston City Park Department and in private practice, but, as Wheelwright biographer Carole A. Jensen has pointed out, Wheelwright himself had been involved with resort architecture in the Penobscot Bay region of Maine in the 1880s.<sup>36</sup> In 1883 he had led a group of Boston friends in the establishment of a vacation colony at North Haven, and his 1884–85 design for "Stormaway," a three-story summer home for Boston lawyer Moorfield Storey, began his work in the Shingle style in Maine. He designed the Islesboro Inn (1890, 1892) and numerous cottages in Queen Anne and Colonial Revival styles in Maine until at least 1909. The

siting of the Howland Mill Village superintendent's house and the massing formula of the men's boardinghouse seem to have been strongly influenced by this elite architectural tradition.

#### THE MILL VILLAGE IN CULTURAL CONTEXT

That the Howland Mill Village was regarded not simply as workers' housing but as a prototype for a better way of life for industrial labor is clear in both local and national accounts. One 1889 New Bedford history described the cottages as "models . . . designed for single families [and] attractive and varied architecture. . . . The territory has been laid out in accordance with modern ideas. It will be intersected by streets fifty and sixty feet wide, and breathing places, which may one day be fitted as parks, are provided for in the plans."<sup>37</sup> Six years later, an international study by the United States Commissioner of Labor cited the Howland Mill Village as one of six examples of "model small houses." It declared the houses' plumbing to be "of the most approved type" and noted that the designs created "thorough ventilation everywhere." "Waste water and refuse go into the sewers," the report noted. "An unlimited quantity of water is allowed."<sup>38</sup>

The Howland Mill Village emerged in a particular climate of concern about the conditions in which the world's new industrial populations lived. By 1846, the perilous density of Boston's working-class neighborhoods had prompted Harvard Medical School's Henry Ingersoll Bowditch to investigate the public health aspects of existing workers' housing.

Bowditch surmised that families of workmen living outside Boston were healthier because they “have more room and better air, and the women and children might cultivate a small garden.” His pioneering research on the causes of tuberculosis throughout the 1850s culminated in his 1862 *Consumption in New England* and helped cultivate an awareness that a significant relationship existed between local environment and all aspects of health. “It is impossible not to draw the inference,” Bowditch argued, “that there is some intimate relation between the wise policy of separate homes . . . and the conditions of public health.”<sup>39</sup>

The intensity of this critique grew

stronger after the Civil War, whose staggering losses from unsanitary conditions and disease newly emphasized the problem. In New Bedford criticism was leveled particularly at the housing built by the city’s two oldest textile corporations, Wamsutta and Potomska (fig. 13). In 1888 the Wamsutta Mills responded by installing water closets, painting its wooden units different colors to break up the monotony of the tenement blocks, and providing gardens for the workers near their tenements.<sup>40</sup> Nevertheless, public reaction to the living conditions in mill housing continued to be harsh: the city’s most prominent minister, Unitarian William J. Potter, referred to the Wamsutta Village as a “pes-

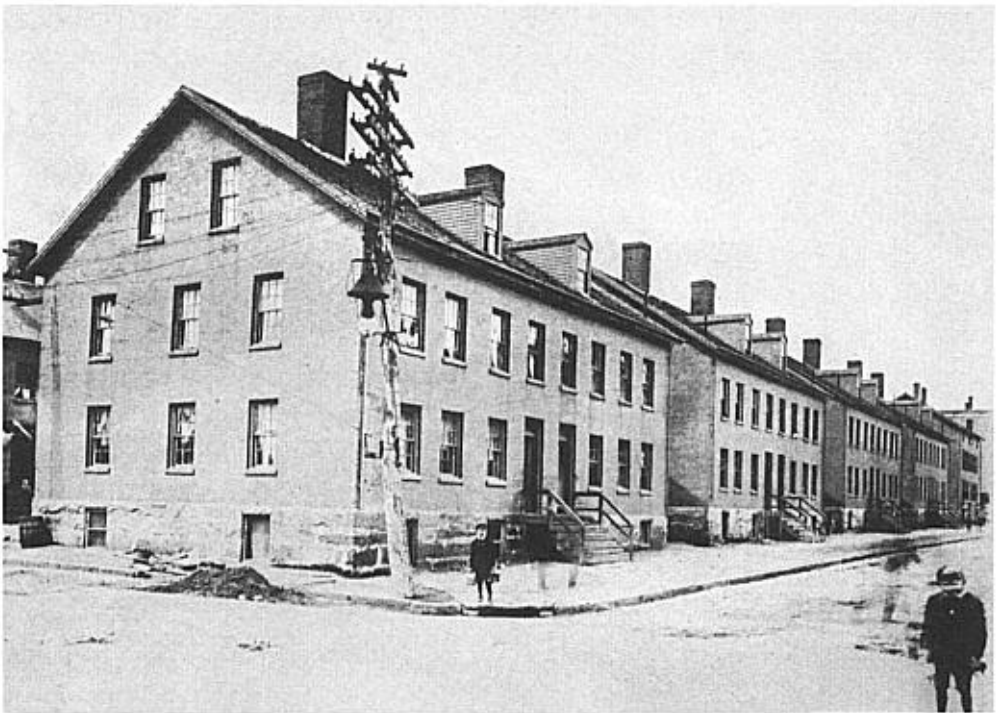


Fig. 13. About 1848 eight brick boardinghouses were constructed for Wamsutta Mills’ skilled male operatives. Later corporation housing was wooden and ranged from gable-end sidehall houses to “flat-top” three-deckers. Wamsutta Mills alone owned more than three hundred tenements by 1889. Photograph in Whitney, *Infant Mortality* (1920).

tiferous excrescence” in 1892, and two years later a local paper similarly described the “squalor” that existed in the mill housing of the Potomska Corporation.<sup>41</sup>

Out of this concern grew reform that placed a high value on the introduction of design strategies aimed to prevent disease and promote healthy living in the housing of industrial workers. Robert Owen’s far-famed work at New Lanark, which he discussed at length in his 1813 *New View of Society*, had set the stage for industrial housing reform in Europe as well as in the United States. Surely, given his mother’s interest in Owen, Howland was aware of the reformer’s vision of a mixed-use community that provided a pastoral, aesthetic quality to the residential area opposite the mill and the potential economic benefit of reducing food expenses for the worker. Howland’s provision of garden space for each of the fifty Howland Mill cottages may have been influenced by Owen’s ideas. Fourierism also stimulated the development of new forms of workers’ housing on both sides of the Atlantic.<sup>42</sup> In 1853 British industrialist Sir Titus Salt, a disciple of Charles Fourier, created Saltaire, a town designed for the manufacture of alpaca woolens on the Aire River in northern England. Model workers’ houses had also been displayed at international trade fairs as early as 1851.<sup>43</sup>

Model workers’ housing began appear more regularly in the United States after the Civil War. In 1871 Bowditch, who had helped establish the State Board of Health in Massachusetts several years earlier, worked with other prominent citizens to establish the Boston Cooperative Build-

ing Company to build and supervise houses for working men. Bowditch’s studies and these houses influenced the establishment of statewide minimal room sizes and adjacent outdoor spaces in order to avoid overcrowding in housing for the American working population.

Two years earlier, Olmsted had attempted to articulate the connection he perceived between landscape architecture and the quality of life in his upscale Riverside Housing Community in the Chicago suburbs.<sup>44</sup> At Riverside, Olmsted attempted to bring the advantages of the city into the countryside by creating convenient commuter rail access to Chicago and installing such amenities as gas, water, roadways, walkways, and drainage. Olmsted did not justify these amenities on humanistic principles alone; such “urban conveniences,” he argued, would “give any farming land in a healthy and attractive situation the value of town lots.”<sup>45</sup> To preserve the pastoral quality of the town, Olmsted recommended placing dwellings on lots fifty or a hundred feet or more apart and at some distance from the public road. Within the community gently curving roadways were designed to suggest “leisure, contemplativeness, and happy tranquility,” and its open, landscaped “public grounds” provided space for recreation.<sup>46</sup>

After he created Riverside, Olmsted argued that just as urban amenities could enhance rural life, suburban features could improve city neighborhoods where workers lived. Urban neighborhoods might be improved by “the construction of good roads and walks, the laying of sewer, water, and gas pipes, and the supplying of suffi-

ciently cheap, rapid, and comfortable conveyances to towns” and by the provision of “breathing places.” “Man’s enjoyment of rural beauty,” he wrote, would be enhanced by foliage along the streets, which according to “modern science” purified the air and induced “health, virtue, and happiness.” To allow foliage to reach maturity and the free flow of traffic, Olmsted suggested wider streets as well.<sup>47</sup>

By the early 1870s, the principles Saltaire and Riverside had begun to put in place received the endorsement of Edward Everett Hale, one of Boston’s most famous ministers, in his *Old and New* (1870) and *Workingmen’s Homes* (1874). The emphasis on landscaping in these neighborhoods of workers’ cottages, Hale declared, “encouraged domesticity” and “promoted sociality, intercommunication, exercise, and the enjoyment of pure air.”<sup>48</sup> By 1887, as public attitudes toward urban density and workers’ living circumstances shifted, the Massachusetts Board of Health and both local and national periodicals charged that large tenement blocks diminished the quality of workers’ lives.

In New Bedford, the growing social and legal pressure to improve the aesthetic and sanitary conditions of the existing mill housing had impelled both the Grinnell and Acushnet mills to build smaller, detached units in 1882.<sup>49</sup> While Howland Mills was not the first textile corporation to create detached housing for the city’s workers, it was the first to break consciously from the grid-like unison of previous urban mill developments,<sup>50</sup> and it went a great deal further than other existing New Bedford corporate housing to

address the well-being of workers. The provision of indoor plumbing in single-family corporate housing—complete with flush toilets, hot and cold water, marble wash basins, bathtubs, and laundry sinks—was well beyond any explicit legal directives of the day.<sup>51</sup> The corporation’s single-family housing was of recognizable quality; its indoor plumbing and heating were well designed; its extensive water, sewer, and roadway system was markedly better than contemporary city standards; and the village avoided the criticisms of monotony and repetition. Indeed, the Howland Mill Village incorporated all the ingredients Olmsted had outlined as critical: it had wider streets bordered by foliage to purify the air, generous spacing between family dwellings, and a rail connection.

The significance of the Howland Mill Village becomes clearer when it is compared to the other groups of company-built “model small houses” cited as exemplary in the 1895 federal labor commissioner’s study—those of the S. D. Warren and Company (Cumberland Mills, Maine); the Willimantic (Connecticut) Linen Company; Pullman’s Palace Car Company (Pullman, Illinois); Merrimac Manufacturing Company (Lowell, Massachusetts); and Robert Treat Paine (Boston).

Of these projects, the Lowell, Willimantic, and Pullman housing predated the Howland Mill Village, and both Willimantic and Pullman were influenced by the design principles put in place at Saltaire.<sup>52</sup> Still, neither project applied the principles of suburban-style landscape architecture and contour planning to workers’ neighborhoods as consistently as did

the Howland Millage Village.<sup>53</sup> George Pullman had hired a noted architect (Solon S. Beman) and landscape architect (Nathan F. Barrett) to design his model mill village in Illinois seven years before Howland hired Wheelwright and Haven.<sup>54</sup> But while there were wide, well-maintained, macadamized streets lined with young shade trees, most of the plan was laid out in a grid; picturesque landscape features were limited to the foreground space of the administration building and the Florence Hotel (fig. 14).<sup>55</sup> Similarly, the Oaks, a neighborhood of forty workers' cottages planned by William Eliot Barrows for the Willimantic Linen Company in Connecticut in 1880,<sup>56</sup>

only hints at the contour planning principles of the romantic suburb tradition.

Perhaps the closest parallel to the Howland Mills complex, Willimantic Linen Company began operations in 1857, and its Mill No. 4, built in 1880, was both the largest cotton mill in the world and the first to be designed and built to be illuminated by electricity.<sup>57</sup> Howland certainly would have known this, as the lighting demonstrations in themselves attracted much attention; he may in fact have visited Willimantic when he traveled in 1882 to research cotton manufacturing. At Willimantic and at the Howland Mills alike, the mill village paralleled the construction

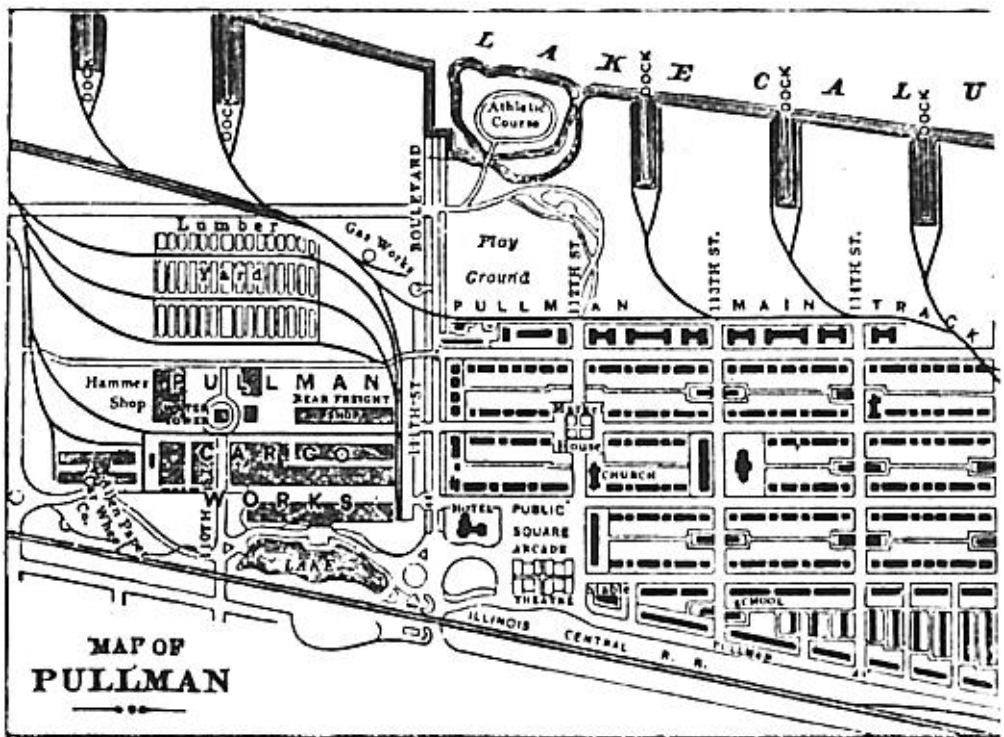


Fig. 14. This plan of Pullman appeared as an inset to an engraving of the administration building and the Florence Hotel in an 1888 article in Harper's New Monthly Magazine. Curvilinear landscape design appeared only in front of the hotel, by the lake, and along two sides of the playground, not in areas where workers lived.

of a new mill, and Willimantic's "modern group of forty houses" of 1880 was the facet that attracted the labor department's attention (fig. 15).

Barrows, who supervised the design of the housing as the company's vice-president, believed that by "placing people among pleasant and beautiful surroundings they will become more careful, cleanly, tasteful, and intelligent and therefore . . . more valuable to their employers." The Oaks drew on the physical layout of Saltaire, midcentury designs for workers' housing at Lowell, the romantic architectural and landscape designs of Alexander Jackson Davis and Andrew Jackson Downing, and even the rustic tradition of the nearby Methodist campground (1860).<sup>58</sup>

The cottages were of four different designs staggered in their order of construction and in siting arrangement to appear more diverse. The Oaks also broke with grid planning and tentatively embraced a curvilinear design.

Many features of the Oaks—from electric lighting in the mills to embryonic contour planning, single-family cottages, gardens, a library, and an amusement hall—existed also or were proposed at Howland Mill Village. Howland and his architects even planned forty cottages originally, as at the Oaks, and their design is strikingly similar to those at Willimantic. Still, the Oaks lacked the integration of parks, boulevards, housing, sanitation systems, industry, and transportation of the Howland plan, and



Fig. 15. *The workers' cottages on Quercus Avenue in Willimantic were photographed as they neared completion in early 1881. Courtesy Canadian Center for Architecture, Montreal.*

the majority of the housing was clustered along only two winding streets.<sup>59</sup>

Perhaps more significant, and more distinctly revealing of Howland's progressivism, is the attitude toward industrial labor that its design embodied. Pullman and Lowell were both more thoroughly integrated with a sophisticated infrastructure than the Howland Mill Village, and Willimantic applied, if tentatively, the design principles of the romantic suburb to workers' housing. But the design of neighborhoods in these three project made manifest a certain paternalism toward workers that was virtually absent from Howland Mill Village. Judging from the 1823 plan for workers' housing in Lowell, corporate authority had produced landscapes of unified control and visual order while regulating nearly every aspect of operatives' lives as a means of ensuring a clean and morally upright industrial setting.<sup>60</sup> Prospective residents of Pullman had to apply at the agent's office and, if found to be of "good character," were permitted to sign a one-year lease, which among other things limited tenants' freedom to decorate their homes without written approval. The company attended to lawns and tenements; the Pullman resident had "everything done for him, nothing by him," one reporter observed after an October 1884 visit. One tenant at Pullman was later quoted in the *Cleveland Post* to have stated, "The company owns everything and it exercises surveillance over the movement and habits of the people in a way to lead one to suppose that it has proprietary interest in [their] souls and bodies."<sup>61</sup>

At Willimantic Linen Company's

Oaks as at the Howland Mill Village, houses were set aside exclusively for skilled workers. But the Oaks dwellings were spatially segregated on lots according to rank in the mill, and situated under the watchful eye of Barrows, whose home, also built in 1880, was located on a bluff overlooking the cottages.<sup>62</sup> Barrows believed workers were like misguided children who could be reformed by the powers of education and culture away from inclinations to riot, strike, and drink. All employees residing in the forty cottages at the Oaks, for example, had to maintain gardens, and Barrows had garden inspectors under the guise of a garden club to ensure that gardens were properly tended. Barrows gave awards for the best gardens and had a gardener supply each home with cuttings.<sup>63</sup>

The Willimantic Linen Company also constructed a fashionable Stick Style building in 1877 with a company store on the first two floors and, as at Saltaire, a library and a reading room for employees and inhabitants of the town in the top story.<sup>64</sup> Forced upon the workers in response to a \$345,000 increase in city taxes in 1877, the store took scrip only in exchange for goods, and while it turned a considerable profit for the corporation, the debt operatives incurred there tied them more closely to the control of the mill owners. Barrows had also limited the worker's freedom of movement by not connecting the housing to the city's rail system. In 1882, he also announced that all linen company employees who could not read or write in English by July 4, 1883, would be dismissed—unless they took free night classes in the Dunham Hall

Library, in effect Barrows's own crucible for "social alchemy."<sup>65</sup>

Rents were low at Willimantic—they ranged from 10 to 12.5 percent of tenants' earnings, as opposed to 15 percent at the Howland Mills—and the housing was deemed of "superior character." However, five percent of the lodgings were unoccupied. The 1895 labor commissioner's report noted, "In 1884 a well intentioned agent tried to get all employees under 16 to go from 9 to 10 in the morning to a room which was heated and well ventilated and provided seats, where bullion or milk and crackers were served free. The half hour following was given to play. It was found that the young people would not go voluntarily, and some so far objected to the practice that they left the works."<sup>66</sup> The study noted that women resisted being compelled to leave their working room and to eat their lunch in this space; some objected to mixing "with working partners of objectionable nationalities," while others were embarrassed by the comparison of their dinner pails.<sup>67</sup> Operatives also resisted the use of magnifying glasses given to inspectors of thread to protect their eyesight. "There is undoubtedly something in the American temperament, or perhaps one had better say in the temperament of laborers working in America, which is hostile to gratuitous help from employers," the study concluded. "... The people dislike to feel that they are under control."<sup>68</sup>

The Howland Mill Village was flexible and democratic by comparison. The more emphatic use of contour planning within the cottage setting, coupled with the relative absence of company officials in the

housing arrangement, softened surveillance and public performance. The village included a mill superintendent's house, a relatively unassuming two-story, gable-front cottage oriented not to the mill village and the adjacent factories but to afford an unobstructed view of the ocean and Clark's Point. Howland and his architects also never envisioned a company-controlled shopping district; instead, the trolley provided access to shopping areas of choice.

Rents at the Howland Mill Village were reasonable and stable, not having been raised between the 1888–89 construction of the mill cottages and 1895. Tenants were permitted to sublet to other employees in the mills, and they were allowed to take in boarders to offset rent payments, which probably accounted for the fact that five of the seven rooms in the larger cottages were bedrooms. Not only could boarders be taken in, but renters did not have to be heads of families. Sons or daughters who worked for the Howland Mills were entitled to have their parents live in corporate housing as long as a corporation employee paid rent through salary deduction. Coupled with a general shortage of worker housing in the South End, these provisions kept both the cottages and the men's boardinghouse full. The boardinghouse even realized an estimated profit of about three percent of the rental income.<sup>69</sup>

Tenants of the mill cottages could not become proprietors of the houses already built, but they could purchase vacant land from the corporation and build for themselves. Land was to be sold on what was then referred to as "long time" or a mortgage contract, and the company promised

“every reasonable assistance . . . to help them to build.”<sup>70</sup> Robert Treat Paine had made an early effort to establish building and loan associations to help Boston workers buy their own homes, but the practice of selling rather than renting workers’ housing was still rare in the United States at the end of the nineteenth century: even at the later (1896) Bancroft Park housing development designed and built for the E. D. and G. Draper Company of Hopedale, Massachusetts, only the single-family houses rented by the managers could be purchased, and then only at the end of ten years.<sup>71</sup>

Howland’s plan to create a park for workers at the Howland Mill Village also suggests his subscription to the progressive ideas most closely associated in his day with Olmsted and his onetime associate Charles Eliot, both of whom had major estate commissions in New Bedford in the 1880s.<sup>72</sup> Howland’s family had long and actively pursued horticulture as an avocation, as had many of New Bedford’s elite,<sup>73</sup> and in 1892 he and his business associate Morgan Rotch, then a member of the New Bedford Park Commission, proposed to sell to the city land in the Howland Mill Village for a “Cove Park” situated along a parkway that the firm of Olmsted, Olmsted, and Eliot had proposed to create that year between three new parks in the city’s extreme northern, southern, and western reaches (ultimately Brooklawn, Hazelwood, and Buttonwood parks).<sup>74</sup> Thirty years later, one newspaper account held that because “the artistic side” of the model industrial complex “made strong appeal” to Howland, he had “secured famous landscape archi-

itects” to plan the park.<sup>75</sup> These architects have not been identified, but the close correlation of the Howland-Rotch proposal with the plans then being put forth by the Olmsted firm suggest the latter may have been involved.

By 1875 the city engineering study had already blocked out sections of the city for parks, including a “marine park” on Clark’s Point, then the site of only two estates—the summer homes of William D. Howland and his mother, Rachel.<sup>76</sup> In the early 1890s the Olmsted firm submitted two proposals for creating an interconnected park-parkway system and for developing the “marine park” as an integral component of the system at the abandoned Fort Rodman, of which the city had been given custody in 1892 (fig. 16).<sup>77</sup> A stately promenade and an adjacent ten-mile, eighty-foot-wide scenic parkway—all told, 460 acres of scenic open space—would connect the industrial districts in the north and south ends of the city. The plan envisioned that wagonettes similar to those at Olmsted’s Franklin Park in Boston would carry workers for ten or twenty cents as far as the Fort Rodman property at Clark’s Point.<sup>78</sup> Olmsted, Olmsted, and Eliot emphasized the value of the plan to the city in a June 1894 letter:

The Clark’s Point property with its grand views of the bay is remarkably distinctive and fine. . . . Playgrounds, amusement houses, all constructions however useful, will be subordinated to the scenery, because of the well known fact that nothing is so refreshing to the tired townspeople as pure rural landscape, and because after acquiring such considerable areas it would



Fig. 16. Olmsted, Olmsted and Eliot's proposal for a parkway connecting New Bedford's three main parks would have redesigned and enhanced existing alignments from the northernmost park (Brooklawn) to the southernmost ("marine park," south of what became Hazelwood). Howland's proposed Cove Park would have been along this parkway on the triangular site at the head of Clark's Cove. John Truitt of the author's research team discovered this illustration and the firm's signed proposal in a miscellaneous file in the building permits department at New Bedford City Hall; no other copy of the plan is known to exist. Courtesy New Bedford City Hall.

be bad economy for the city to put them to any other than their highest use.<sup>79</sup>

John C. Olmsted claimed New Bedford's marine park would be the "finest on the Atlantic Coast." The completed Olmsted, Olmsted and Eliot park/parkway proposal was estimated to cost two hundred thousand dollars.<sup>80</sup> In June 1892, the New

Bedford Park Commission, created a year earlier, had sold bonds for the purpose of buying lands for the proposed "system of parks," and in 1895 it allocated five hundred dollars to the Olmsted firm to develop a preliminary plan and engineering study for Buttonwood Park.<sup>81</sup> However, facing new city leadership and a national depression, the plans stalled.

Brooklawn Park was created in the North End, and by 1901 voters reluctantly agreed to fund Hazelwood Park on the former grounds of the Howland summer estates instead of a marine park at Clark's Point. But in place of wagonettes on scenic parkways connecting these parks and both ends of the city, streetcars—then the icon of urbanism—carried workers through the city and to the parks.

Howland's vision of a model mill village had turned away from social control aimed at recasting the worker totally in the image of the corporation to an ideal of community where the identity (and, following the views of English social reformers John Ruskin and William Morris, perhaps even the joy) of the worker was encouraged in an atmosphere of greater personal freedom.<sup>82</sup> Perhaps the real significance of contour planning, whether in Olmsted's system of parks through New Bedford's working-class neighborhoods or in the Howland Mill Village itself, is the level of spatial and personal freedom it implied for the mill worker. In Lowell and Pullman, the grid in which workers' housing was placed and constrained mirrored the rigidity of corporate control over the lives of its employees both inside and outside the mill setting. By contrast, as an 1891 article in the *Cleveland Plain Dealer* pointed out, the Howland Mill Village project was intended to attract and keep skilled workers and maintain agreeable labor relations without trade unions:

How can we secure and retain the best class of operatives? Treasurer Howland laid before the directors his plan to secure these ends and the

extent to which they have been carried out they have been remarkably successful. . . . In short, every effort has been made to attract to the mills . . . a most desirable class of help. In the whole scheme there has been nothing philanthropic or charitable but every move has been made on the broadest of economic ideas with a view to securing and holding the best efforts of the operatives and thus securing the greatest amount of work at the least possible cost and waste. . . . The corporation has paid excellent dividends [and] good wages have been paid.

. . . Such an undertaking as this carried out on such a broad plan shows that there need not be differences between capital and labor when both endeavor to live together in harmony. There is nothing cooperative in this scheme, as the term goes, yet the operators reap many good results from their steady careful work. Mr. Howland has done a great work in carrying out this undertaking and the benefits will be wide-reaching . . . a few more such ventures as this and we shall see the beginning of the end of the great struggle between capital and labor.<sup>83</sup>

Corporate paternalism certainly existed at the Howland Mills: as at Willimantic and Pullman, Howland had identified a future need for "annexes, such as libraries, reading rooms, or halls for social or literary reunions" and envisioned "a large brick building to contain a gymnasium, and evening school . . . and possibly a reading room or library; a club room or amusement room for men and helpfulness for women conducted on the general lines recognized in the working girls' clubs now organized so successfully."<sup>84</sup> Howland told the *Cleveland Plain Dealer* that he also hoped to cre-

ate a cooperative insurance company “to provide against the sickness or disability of workmen and to aid their families in the event of their death.”<sup>85</sup> Thus Howland arguably projected certain elite values about living and recreating onto his workforce (including the seaside resort image of the housing), and such benefits as long-term mortgages and health insurance kept workers tied to the workplace for long periods. The company also had discharged those “undesirable or troublesome operatives” who had attempted to organize a union at the mills in February 1891.<sup>86</sup> Later events, however, demonstrated that Howland exerted a far less intrusive mode of social control than most industrialists of his time. And had the Howland Mills survived, and Howland’s Cove Park and the marine park been built and linked to other urban recreational spaces, a very different industrial landscape might have emerged than what materialized in the decades after 1900.

#### THE END OF THE HOWLAND MILL VILLAGE

Both the Howland Mills and its workers’ village unraveled for the same reasons that their construction had been initiated and executed so swiftly—Howland’s connection with the city’s business and political elite and his particular dedication to the welfare of his workers. By all accounts, Howland had a strong and supportive relationship with his operatives. When the state law mandating a ten-hour day was passed in 1892 (reducing the work week of certain mill employees from sixty to fifty-eight hours), most New Bedford mills cut wages to offset operating costs. Howland, how-

ever, honored the shorter work day and refused to cut wages. That same year, when many workers had to be laid off because of the sharp downturn in the textile market, Howland lowered the rent and in some instances did not collect it at all.<sup>87</sup>

Howland also did not follow the lead of the New Bedford Manufacturers Association in 1894 when, in response to the severe downturn in the national economy the previous year, it shortened hours and announced two successive wage cutbacks totaling approximately 25 percent. He was out of town when the other mill managers elected to cut back pay rates, but Howland ultimately resolved to run his mills at the old pay rates so as not to sever “the smooth and friendly relations we have in our mills at the present.”<sup>88</sup> As a result, Howland’s workers did not strike with the rest of the city’s ten thousand textile workers on August 20, 1894, and did not have to accept the 5 percent wage reduction other workers agreed to when the strike was settled by arbitration in October.<sup>89</sup> Howland Mill operatives instead presented their mill manager with a certificate of merit for his attitudes towards his employees. The *American Wool and Cotton Reporter* observed of the Howland Mills in 1894, “A strike is as much an unknown incident in their whole career as an impairment of their credit.”<sup>90</sup>

Within three years, however, Howland’s credit was so substantially impaired that his mills and his housing experiment came to an abrupt and sensational end. The general downturn in the textile market related to the Panic of 1893 had brought several New Bedford corpo-

rations to the brink of economic disaster, including all three of Howland's enterprises (Howland Mills, New Bedford Manufacturing Company, and Rotch Mills). Like several other New Bedford Mills, they had expanded too quickly in anticipation of a continued high demand for goods and did not allow enough time to retrieve capital. Moreover, the mill village had come at a high price to the corporation. The land upon which the group of model dwellings had been built had cost only \$3,500, but sewage, drainage, water connections, and other improvements totaled \$38,000. By 1895, the corporation owned fifty houses at a total cost of \$104,000 and a large boardinghouse that cost \$36,000.<sup>91</sup> To these expenses were added the costs of the water system, additional road improvements, and perhaps even a share of the 1892 street railway extension. With only five thousand dollars received annually in rent from all the dwellings, increased revenues from the property were clearly needed to absorb the cost of the infrastructure. Finally, the most speculative part of the venture—the sale of lots to workers wishing to build their own houses—was structured in such a way as not to permit a quick capital return.<sup>92</sup> By 1897, the rapid expansion of the Howland Mills resulted in \$2,069,732 in assets, but the corporation generated only \$114,000 in profit and carried \$965,000 as debt. With a \$200,000 business note coming due, the company had only about \$40,000 in cash with which to pay it. Howland was forced to request an additional \$200,000 from area banks to cover the note.<sup>93</sup>

As treasurer of three separate corporations, Howland had allowed all of the

mills to become overcapitalized and excessively indebted without revealing these facts to the board of directors. The “embarrassment” of Howland's financial mismanagement of three corporations, following on the spectacular failure of the Bennett and Columbia mills the previous week, shocked the textile interests of the city.<sup>94</sup> Given Howland's standing in the city, the so-called “deceptions of the treasurer” were handled kindly in the newspaper, but the corporations' excessive debt was anathema in the financial community. Moreover, Howland's handling of the 1894 strike had created clear divisions within the New Bedford textile industry; the spinners union was said almost to have worshipped Howland, while such textile manufacturers as Andrew Pierce felt betrayed by Howland's actions during the strike relative to the agreement several corporations had worked out in his absence. This incident and the mills' indebtedness eroded Howland's earlier base of support among the business interests of the city.<sup>95</sup> The banks, whose board of directors were made up of the same mill owners who witnessed Howland's opposition to lowering wages when the ten-hour work day was instituted, were no doubt concerned about Howland's radical social agenda; by maintaining full production and paying full wages from 1893 to 1897, when other workers and mill owners were severely cutting back, Howland was after all going against the grain not only of the other mills in the city but of the national economy in general.

On April 24, 1897, Walter Clifford, vice president of the National Bank of

Commerce, which had done much of the Howland Mills business, told the local newspapers that the banks in the city intended to help Howland's corporations with the note coming due "provided the books showed a condition of things which would warrant it and an examination was begun." But the debt caused the banks to withdraw their offer, at which point the mills' financial difficulties were revealed to the public.

Then, on April 29, William D. Howland disappeared. Upon hearing the news and learning of the financial difficulties the mill faced, the operatives in the Howland and Rotch mills took an "unprecedented turn" and "expressed their willingness, if it would relieve the stress on the corporation, to sustain a temporary cut-down, or even forego their pay days for a time, till such time as the corporations can better afford to make payment."<sup>96</sup> But on May 6, a week after he vanished, the *Evening Standard* reported that Howland's body had been found that morning under a North Street pier. He was still wearing his top hat and gloves and had important bank documents in his pocket. The newspaper added, "On Friday morning April 23, Mr. Howland had a conference with Otis N. Pierce of the National Bank of Commerce, when Mr. Pierce announced the decision of the bank to refuse further credit to the Howland Corporation unless the books could be opened to expert examination. . . . It is generally accepted that the despondent treasurer took his own life within half an hour after the time he left his office with Harry M. Pierce, his bookkeeper."<sup>97</sup>

In the end, more was lost than the

three mill corporations under Howland's direction. Howland's death also signaled an end to both naturalistic planning and other socially conscious schemes for housing mill operatives in the city. Regrettably, other corporations used Howland's earlier policies, such as his reluctance to lower wages in connection with the mandated ten-hour work day, as examples of how such practices inevitably led to corporate failure.<sup>98</sup>

The promise that the Howland Mill Village represented ended suddenly. Its influence, however, can be seen in workers' housing at Hopedale, Massachusetts, and Vandergrift, Pennsylvania, projects that followed immediately on its heels and that have previously been accepted as the benchmarks of picturesque industrial planning.<sup>99</sup> The E. D. and G. Draper Company of Hopedale had begun its company town in 1856. But until its 1896 Bancroft Park housing development the town had been laid out on relatively flat terrain in a grid pattern.<sup>100</sup> Warren Henry Manning (1860–1938), a member of the Olmsted firm from 1887 to 1896 who had been superintendent of planting of Buttonwood Park in New Bedford, had drawn up plans for grading and planting at Hopedale in 1888. Even if he had not been involved directly in planning the Howland Mill Village, Manning was almost certainly aware of the contour plan put in place there and may have helped persuade Hopedale Company officers to create a similar plan. The design of Hopedale's Bancroft Park (about 1898)—its shingled double-family housing sited on curved streets and walks, and its twelve miles of macadam paving lined with stone

curbing and nearly two miles of sidewalks—is indeed similar to that of the Howland Mill Village (fig. 17).<sup>101</sup> The expansive shoreline park Manning designed for Hopedale between 1898 and 1913 also had precedent in New Bedford's Cove and Marine park schemes.

The Howland Mill Village did not, however, survive the liquidation of the corporation in 1899. The mill assets were turned over to other parties, the receivers cut pay rates to match those that prevailed at other New Bedford mills, and the workers struck for the first time since the corporation was organized.<sup>102</sup> In 1899 the New England Cotton Yarn Company bought the corporation, including the mill housing, the open land along the Dartmouth city line, and a small piece of land on Clark's Cove (fig. 18).<sup>103</sup> The area beyond Dartmouth Street planned for model mill housing ultimately became the

site of the Sharp Manufacturing Company.

When New Bedford's economy recovered by 1901, it was clear to developers that textiles were in New Bedford to stay, and speculative builders took over the rental mill housing market. By 1902, the cottages designed and built for Howland Mill operatives became housing for middle management of the Gosnold Mill, which had purchased the mill holdings from the New England Cotton Yarn Company that year. Other speculation followed. The undeveloped area north of the Howland Mill Village, originally set aside for sale to Howland operatives, became packed with large, multifamily three-decker rental flats built predominately during the 1910s by local land developer Joseph T. Kenney to accommodate Sharp Manufacturing Company and Gosnold Mill employees.<sup>104</sup> The space laid aside for the proposed but never completed park in the Howland Mill Vil-



Fig. 17. *The housing at Hopedale under construction, about 1898; photograph in Model Factories and Villages (London, 1905).*

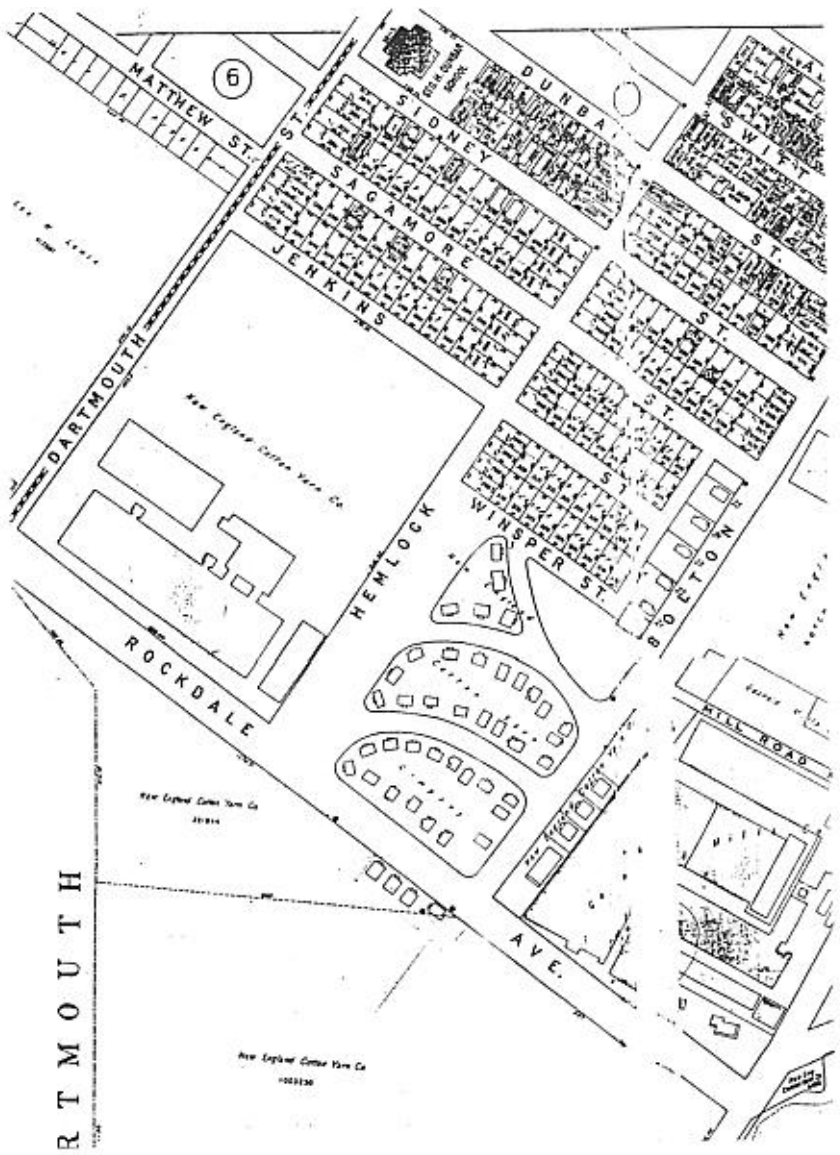


Fig. 18. The 1911 Walker map of New Bedford shows the mill village amid the property purchased by New England Cotton Yarn Company in 1899. The area north of the mill village had been subdivided into small lots and would be filled with three-deckers housing workers at Gosnold, Rotch, and Sharp mills. Courtesy New Bedford City Hall.

lage was largely taken over by the Page Mill between 1906 and 1909. By 1920 the area the Olmsted firm proposed for a marine drive and park was described as being “covered with mills and tenement houses,” and city residents spent leisure time at Acushnet

Park, an “amusement house” of precisely the sort Olmsted had hoped to avoid.<sup>105</sup>

New Bedford’s mill and housing practices were set, therefore, on a very different course, and the city’s biggest textile boom was still ahead. In the decade follow-



Fig. 19. *The Howland Mill Village, 1996. Photograph by Kingston Heath.*



Fig. 20. *A street of New Bedford triple-deckers; photograph in Whitney, Infant Mortality (1920).*

ing Howland's death, from 1900 to 1910, New Bedford witnessed its greatest mill expansion and its greatest increase in population.<sup>106</sup> The sheer volume of mills (seventy by 1923 as opposed to fifteen when the Howland Mill was built) and the need to house so many more operatives demanded a very different housing response. The entry of speculative builders into the housing market freed up mill owners' investment capital for new corporations and thus fanned the rate of mill expansion. In addition, after the precedent of the 1895 Whitman Mill, out-of-city investors began to incorporate New Bedford textile mills. The era of local governance over New Bedford's economic and physical destiny, which the city's leading families had fashioned in the eighteenth century, was thus challenged by new mill owners and housing developers alike. These developments, coupled with the temporary downturn in the national economy, doomed the Howland Mill Village. "Practical men took hold of the situation and then covered the mill districts with three and four deckers and sham built houses with 'modern improvements,'" one retrospective newspaper article noted in 1922. ". . . Then the city came along and straightened the winding roads designed by Mr. Howland's landscape architects and spoiled a vision of Mr. Howland which deserved better consideration."<sup>107</sup>

In the summer of 1996, the Rotch Mill complex adjacent to the Howland Mills was razed. However, the bachelors' boardinghouse, albeit modified, and approximately forty-four of the original fifty Howland Mill cottages still stand

(fig. 19), as do Howland Mills Nos. 1 and 2, adaptively reused as retail space. Today the housing and the mills are one of the city's few remaining complexes of mills and adjacent workers' housing as well as a model mill village of national significance.<sup>108</sup> In its wake, the three-decker builders not only offered a new housing alternative to the city's working population from the 1890s on, but they also constructed a new regional identity for New Bedford as a truly industrialized city (fig. 20). Howland and his architects had offered a vision of unity between nature and technology and the promise of enlightened industrial management, a unique urban vision that was sandwiched between paternalistic planning on the part of the powerful few and the entrepreneurial efforts of the many and that gave way in the end to an omnipresent commonality of design.<sup>109</sup> ✱

#### NOTES

This paper is part of a forthcoming book entitled *The Patina of Place: The Cultural Weathering of a New England Industrial Landscape*, currently being revised for publication by the University of Tennessee Press. The author would like to acknowledge Tina Furtado and Joan Barney of the New Bedford Free Public Library for their constant, effective, and generous assistance with this article. Joseph Thomas of New Bedford's Spinner Publications shared photographs of the Gosnold Mills from his collection. Llewellyn Howland III offered many significant insights into his family history, shared his family correspondence, and reviewed earlier versions of the manuscript.

1. Patricia Raub, "Another Pattern of Urban Living: Multi-family Housing in Providence, 1890-1930," *Rhode Island History* 48 (February 1990): 6, table 5.
2. Rachel S. Howland to Matthew Morris Howland, Sept. 28, 1881, Howland Family Correspondence, 1878-84, collection of Llewellyn Howland III, Jamaica Plain, Mass.
3. Morgan Rotch, a corporate officer of the Howland Mill Corporation, had been the mayor of New Bedford between 1885 and 1888, when the Howland Mill was being organized. Rotch continued to facilitate the company's expansion at critical points as a member of the Board of Public Works and the Park Commission. He was also a close friend of Morris Howland, William D.'s older brother. William D. Howland himself was a director of the National Bank of Commerce, which his grandfather had founded and of which his father was president. This bank handled many of the business transactions of all three of the corporations for which William D. Howland served as treasurer.
4. As in many urban areas up to the turn of the twentieth century, no administrative distinction was made between government and business; see, for example, the discussion of New York City's administrative structure in Christopher Tunnard and Henry Hope Reed, *American Skyline* (New York: Signet, 1956), 135. Such clarification of city government's power was just beginning to appear in New Bedford during the 1890s with such city agencies as the New Bedford Park Commission, established in 1891, and the Department of Building Permits, established in 1893.
5. Howland family correspondence from the 1870s exists in several collections, but none of William D. Howland's letters or business ledgers have survived.
6. Rachel Howland's prominent social standing in Philadelphia allowed her direct access to people of political and intellectual import, from President Lincoln to Harriet Beecher Stowe, in her day. See William M. Emery, *The Howland Heirs* (New Bedford, Mass.: E. Anthony and Sons, Inc., 1919), 197.
7. Daniel Georgianna and Roberta Aaronson, *The Strike of 1928* (New Bedford, Mass.: Spinner Publications, 1993), 31-32. See page 53 for an informative chart listing "Prominent New Bedford Families on Bank, Mill and Other Board Directorates" by 1928. Though much later than Howland's era, the high degree of influence that this handful of prominent families wielded up to the collapse of the textile economy following the 1928 strike suggests a similar if not stronger business dynamic in Howland's time. See "William D. Howland, Noteworthy Career of the Unfortunate Mill Treasurer," *The Evening Standard* (New Bedford), May 6, 1897, 1, 8; Emery, *Howland Heirs*, 197, 205-6; Everett S. Allen, *Children of the Light: The Rise and Fall of New Bedford Whaling and Death of the Arctic Fleet* (Boston: Little, Brown and Co., 1973), 85, 148-49; David Montgomery, *Beyond Equality: Labor and Radical Republicans, 1862-1872* (New York: Random House, 1967), 289-90; *New Bedford Evening*

- Standard*, Mar. 5 and 6, 1867; *New Bedford Daily Mercury*, Mar. 5 and 6, 1867; Thomas A. McMullen, "Lost Alternative: Urban Industrial Utopia of William D. Howland," *New England Quarterly* 55, 1 (1982): 32.
8. Llewellyn Howland III, telephone interview with author, Oct. 3, 1995. Though often autocratic in his management practices, Robert Owen (1771–1858) was also one of the pioneers of labor law, the cooperative movement, and trade unions. In 1817, he put forth a report for the *Committee for the Relief of the Manufacturing Poor* and proposed an ideal settlement based on collective land use, self-sufficiency, and the mixed use of cultivated land and industry. Owen incorporated these principles of social reorganization in his planning of a model industrial city at New Harmony, Indiana, in 1825. See Leonardo Benevolo, *History of Modern Architecture* (Cambridge, Mass.: The MIT Press, 1977), 1:148–51.
  9. Howland's 1874 graduation is verified by the Brown University Archives at the John Hay Library. The date given in Emery, *Howland Heirs*, 205–6, is 1879. Llewellyn Howland III suggests that Howland may have spent a year abroad and a brief time keeping the books for the Howland whaling fleet before beginning work at Wamsutta Mills. That Howland was probably promoted from clerk is stated in a letter from his oldest brother, Richard S. Howland, to him, dated Sept. 5, 1879. "Yesterday father said that you are feeling very well about your new position at Wamsutta and like the work—which is not so confining as formerly." That Howland was in charge of redesigning two of the Potomska mills for new machinery is stated in a letter from his father, Matthew, to his brother Morris, Jan. 31, 1880; according to his father, William told mill owner Kilburn that "he would rejoice to do it, but that he had all he could do in the office. Then Kilburn said he should be released from that, so Will is rejoicing that perhaps he will have little if any more work as clerk in the office." Howland Family Correspondence.
  10. William D. Sayer, ed., *New Bedford* (New Bedford, Mass.: Mercury Publishing Co., 1889), 146; Leonard Bolles Ellis, *History of New Bedford* (Syracuse, N.Y.: D. Mason and Co., 1892), 458; Judith Boss and Joseph Thomas, *New Bedford: A Pictorial History* (Virginia Beach, Va.: The Donning Co., 1983), 150.
  11. Richard S. Howland to William D. Howland, Dec. 29, 1878, Mar. 17 and Apr. 28, 1879; Matthew Howland to Matthew M. Howland, July 18 and Oct. 28, 1881, Howland Family Correspondence. Cited in McMullen, "Lost Alternative," 26.
  12. The officers of the New Bedford Manufacturing Company were president Charles W. Clifford, replaced shortly by Morgan Rotch; treasurer William D. Howland; and directors Oliver P. Brightman, Charles W. Clifford, Edmond Grinnell, Charles W. Plummer, Edward T. Pierce, William D. Howland, and David Wood. The company originally intended to refit a flour mill in the city's North End as a factory but instead

built a new eleven-thousand-spindle mill just north of New Bedford's center along the Acushnet River. Construction of the second mill brought the total number of spindles to thirty-seven thousand. See Sayer, *New Bedford*, 158-62, and "Howland Mills Involved," *The Morning Mercury*, Apr. 24, 1897.

13. Rachel Howland to Morris Howland, Jan. 11, 1883, notes that her son William's mill stock had increased in value while the value of Grinnell Mill stock had declined. "Quite a feather in his cap," she wrote her younger son. "Well, he drives early and late and means to make a success of it."
14. "Howland Mills Corporation. An Organization of the Company Effected To-day," *Evening Standard*, May 19, 1888. The meeting of the incorporators of the new cotton manufacturing enterprise was held at the National Bank of Commerce, of which William D. Howland was a director. It was organized with capital stock of \$350,000. The purchased tracts are indicated in the *Plan of City of New Bedford from Original Surveys by J.C. Sidney, C.E.* (Philadelphia: Collins and Clark, 1850). They appear as well in the 1871 Beers map of Bristol County.
15. Comparing the 1871 city atlas to the 1875 city engineering survey maps makes clear that industrial subdivision lots had been platted between those years east of Crapo Street to County Street north of Cove Road. These subdivisions are shown on two maps published by Wheelwright and Coggeshall in 1875 as part of an extensive planning study. One was a civil engineering and sanitation map; the other was a plat map for present and future development. These maps were discovered in May 1996 by Ed Portis of my research team in the attic of the New Bedford City Hall. These 1875 maps also show the sites for Brooklawn, Buttonwood, Hazlewood, and the marine park; thus an urban plan for New Bedford was in place by this date. Olmsted may have worked from this map to develop his system of parks in 1892.
16. Related to William D. Howland, Henry Howland Crapo II, son of William Wallace Crapo, was on the original board of directors for the Potomska Mill in 1871 and may have convinced his father between 1871 and 1875 to consider mill development, actual or speculative, in the South End. Hence, the incorporation and construction of the Howland Mills may have moved smoothly in part because a spinning mill complex fit within the anticipated production needs of other mills in which the family and its relations had a vested interest.
17. Sayer, *New Bedford*, 165.
18. Howland had been in charge of repairing older machinery at Wamsutta Mills, and in 1880 he installed new machinery into Nos. 2 and 4 Potomska Mills, said to have saved "the labor of 50 operatives." These tasks, combined with his work in 1881 to draw up plans for a new mill at the Potomska complex, had surely given him ample background to understand a mill's technological needs.
19. For details on the mills' construction, see "Howland Mills Corporation," *New*

- Bedford Evening Standard*, May 19, 1888; "The New Cotton Mills, Rapid Work in the Construction of the Howland Mill," *New Bedford Evening Standard*, Aug. 14, 1888; and "The Howland Mills," *New Bedford Evening Standard*, Mar. 15, 1889. The plans for the 1898 payroll office, produced after the reorganization of the Howland Mill but before the corporation was liquidated in 1899, are on file in the attic storage of the New Bedford Building Department, New Bedford City Hall.
20. "Howland Mills Involved. Three More Cotton Corporations Found to be in Financial Straits," *The Morning Mercury*, Apr. 24, 1897, 1.
  21. John Ruskin, "Nature of the Gothic," in *Stones of Venice* (1853).
  22. *New Bedford Evening Standard*, Aug. 14 and Dec. 14, 1888; Jan. 1 and Oct. 3, 1889, Feb. 25, 1891; *Boston Globe*, Jan. 18, 1920, and Feb. 4, 1922, in *Boston Globe Scrapbook*, comp. Zephaniah Pease, New Bedford Free Public Library. See also McMullen, "Lost Alternative,"
  26. Edmund March Wheelwright's work is noted briefly in Douglass Shand Tucci, *Built in Boston: City and Suburb, 1800–1950* (Boston: New York Graphic Society, 1978), 195, and Carole A. Jensen, "Edmund M. Wheelwright," *A Biographical Dictionary of Architects in Maine* 4, 13 (1987).
  23. For more on Wheelwright, Peabody, and the other principals in these firms, see Henry F. Withey and Elsie Rathburn Withey, *Biographical Dictionary of American Architects (Deceased)* (Los Angeles: Hennessey and Ingalls, Inc., 1956/1970), 273, 462–63, 568, 648–49. See also Jensen, "Edmund M. Wheelwright." According to Withey, Wheelwright began practice under his own name in 1885, not, as Jensen states, 1883; Withey also states that Wheelwright was trained as well at L'École des Beaux Arts, while Jensen contends Wheelwright never officially attended the school. Thus the Howland Mill Village would not have been his first commission. The date of the partnership of Wheelwright and Haven is variously given as 1888 and 1890.
  24. *New Bedford Evening Standard*, Oct. 3, 1889; see also Aug. 14, 1888.
  25. "Mill Notes. The New Howland Mill to be Double the Size of No. 1," *Evening Standard*, Jan. 1, 1889. Several fine photographs of the superintendent's house and outbuildings as they appeared along Cove Road at Orchard Street in 1912 are in the possession of Thomas Whittaker in New Bedford. Whittaker's grandfather had been the superintendent of the Gosnold Mill, which took over the Howland Mill shortly after it failed.
  26. E. R. L. Gould, *Eighth Special Report of the Commissioner of Labor: Housing of the Working People* (Washington, D.C.: Government Printing Office, 1895), 325.
  27. Gould, *Eighth Special Report*, 325.
  28. *New Bedford City Documents* 10, December 1892, Board of Public Works, 26: "The brick sewer on Orchard Street, from the Howland Mill No. 2 to the Rotch Spinning Corporation, was rendered quite costly by the depth of the marsh mud which made it necessary to build a stone and cement foundation.

- This foundation was fifteen feet wide at the bottom and carried up half the height of the four-foot brick sewer.”
29. *New Bedford City Documents* 10, January 1891, Board of Public Works, 12.
  30. *New Bedford City Documents* 10, January 1892, Board of Public Works, 12.
  31. Robert A. Smith, *Merry Wheels and Spokes of Steel: A Social History of the Bicycle*, Stovkis Studies in Historical Chronology and Thought 16 (New York: Borgo Press, 1995). On macadam roads in New Bedford, see *New Bedford City Documents* 10, December 1893, Board of Public Works, 13.
  32. “Mill Notes,” *New Bedford Evening Standard*, Jan. 1, 1889, reported, “The Dartmouth Street line of railway will soon be extended farther toward the Howland Mill village, and there is talk of extending the Old Colony railroad to the Potomska, Acushnet, Hathaway and Howland Mills.” See also *New Bedford City Documents* 10, December 1892, “Street Railways,” 42. The line to Howland Mills was one of only two lines in the city operated by electric power. An electrified street-level line with an overhead conductor was successfully demonstrated in Richmond, Va., in 1887; by 1892 more than eight thousand electric cars ran on city streets in the United States. See Alan Marcus and Howland Segal, *Technology in America* (San Diego, Calif.: Harcourt Brace Jovanovich, Inc., 1989), 151–55, and Carroll Pursell, *The Machine in America: A Social History of Technology* (Baltimore, Md.: The Johns Hopkins University Press, 1995), 136. See also *New Bedford City Documents* 10, January 1892, Board of Public Works under “Transportation Report.”
  33. *New Bedford City Directory* (1895), 60.
  34. Special thanks to Carole A. Jensen for her letter to author of Apr. 7, 1997, about entries in Wheelwright’s ledger associated with social reform issues and workers’ housing.
  35. See Carole A. Jensen, “Edmund M. Wheelwright,” in *A Biographical Dictionary of Architects in Maine* 4, 13 (1989), published by the Maine Historic Preservation Commission.
  36. Caroline T. Daniels, *Dark Harbor* (Cambridge, Mass.: n.p., 1935), and Jensen, “Edmund M. Wheelwright,” 52.
  37. Sayer, *New Bedford*, 165–66.
  38. Gould, *Eighth Special Report*, 325.
  39. Interestingly, Bowditch resisted the notion of workers living in the suburbs and argued that laborers wanted to live near their work, that railroads objected to lowering rates for laborers, and that passengers would find the large numbers of workers assembled at the depots annoying. Howland solved these problems by placing workers’ homes near the mills, essentially bringing the suburbs to the workplace, and by providing a rail service predominately for the laborers, much like the “mill buses” of the modern era. For more on Bowditch, see David P. Handlin, *The American Home: Architecture and Society, 1815–1915* (Boston: Little, Brown and Company, 1979), 253–55, 256–58.
  40. See Thomas McMullen, “Industrialization and Social Change in a Nineteenth-Century Port City: New Bedford,

- Massachusetts, 1865–1900” (Ph.D. diss., University of Wisconsin, 1976), and McMullen, “The Coming of the Mills: Social Change in New Bedford in the Late Nineteenth Century” (Lecture in a series for the New Bedford Bicentennial, New Bedford Free Public Library, 1987), 6.
41. McMullen, “Coming of the Mills,” 6, 7. On Potomska’s housing, see *New Bedford Daily Mercury*, Aug. 23, 1894.
  42. Fourierism was based on the ideas of French socialist Charles Fourier (1772–1837), who believed in enhancing workers’ lives by providing pleasant surroundings, offering good working conditions, and reorganizing the structure of society into cooperative communities. Brook Farm (1841–47) in West Roxbury, Massachusetts, was one of several antebellum utopian communities based on Fourierism.
  43. Model workers’ housing was exhibited in London in 1851 and in Paris in 1867, and the first international housing congress met in Paris in conjunction with the 1889 Paris Exposition, when Howland Mills was being planned. Such international expositions continued, predominantly in Europe, through 1910. Model housing was displayed at the World’s Columbian Exposition in Chicago in 1893. See John Garner, *The Model Company Town* (Amherst: University of Massachusetts Press, 1984), 110–16.
  44. The popular awareness of Olmsted’s Riverside Park was almost immediate. Two years later, Lysander Flagg began a resort development in East Providence, R.I., with a group of businessmen from Providence and Pawtucket. Flagg’s enterprise, named the Riverside Land Company, was a miniaturized version of Olmsted’s model American suburb. It grew into a flourishing resort over the next three decades and certainly would have been known to Howland because his oldest brother Richard was the publisher and editor of the *Providence Journal* during the 1880s. The irregular arrangement of the summer cottages and the use of patterned shingles may have had an influence on Howland’s desire for simple worker’s cottages similar to, but on a smaller scale than, those Wheelwright was building in Maine. See Richard Longstreth, “East Providence, Rhode Island” (Statewide Preservation Report, Rhode Island Historical Preservation Commission, September 1976), 36–39. Special thanks to Richard Longstreth for bringing this community plan to my attention.
  45. Frederick Law Olmsted, “Public Parks and the Enlargement of Towns” (1870), reprinted in S. B. Sutton, *Civilizing American Cities: A Selection of Frederick Law Olmsted’s Writings on City Landscapes* (Cambridge, Mass.: MIT Press, 1971), 52–59. See also Olmsted, “Public Parks and the Enlargement of Towns,” *Journal of Social Science* 3 (1871): 1–36, and “The Justifying Value of a Public Park,” *Journal of Social Science* 12 (1881): 147–64.
  46. Olmsted, Vaux and Co., “Preliminary Report upon the Proposed Suburban Village at Riverside” (New York, 1868), 3, 7. For background on the precedents for the romantic suburb see John Archer,

- “Country and City in the American Romantic Suburb,” *Journal of the Society of Architectural Historians* 42, 2 (May 1983): 139–56.
47. Olmsted articulated these ideas in his February 1870 presentation at Boston’s Lowell Institute and his 1881 article, “The Justifying Value of a Public Park.”
  48. Hale quoted in Handlin, *American Home*, 246–58; see especially the sources listed on 247.
  49. The Acushnet Mills owned twenty-three story-and-a-half frame cottages that served as single-family residences for its operatives, while Grinnell provided a cohesive block of twenty-seven housing units neatly arranged in three rows of gable-end, two-tenement houses. See Sayer, *New Bedford*, 157.
  50. In 1876, Olmsted had addressed the problem of erecting multiple dwellings in New York City, where the density of the population and the constricting pattern of the grid limited the placement of all buildings to one orientation. Additionally, the proximity of the houses limited access to the backyards. This was a problem particularly in the old urban contexts prior to the installation of gas, water, or sewage systems, and it created garbage, trash, and privacy issues for tenants when service people had to go through the connected side alleyways of the units. Olmsted preferred to alter this grid arrangement for urban multiple housing by providing greater space between buildings, introducing more variety in the design of the buildings, and adjusting their orientation to the street. See Handlin, *American Home*, 200.
  51. While corporations were being pressured to address the sanitary conditions of their rental flats by the late 1880s, not until 1896 did the Record of Building Permits in the City of New Bedford even include “water closets” as a category in its building descriptions for the general population. A building permit issued on Jan. 3, 1896, to John Kothusau allowed George K. Teachmur to build two two-and-one-half story three-unit tenements in the North End mill district with *no* water closets. City codes clearly were slow to enforce regulations that affected the local speculative builder. The federal census of 1890 indicates that there were approximately eight occupants per living unit in New Bedford’s Ward 1, where Teachmur’s tenements were. Thus each three-unit tenement would have held approximately twenty-four inhabitants with no inside sanitary facilities.
  52. Though he always denied any outside influence on Pullman, George Pullman had modeled his company town in part after Saltaire, which he may have visited during his trip to Europe in 1873. Like Saltaire, Pullman provided impressive brick housing set amidst pleasant surroundings and offered such amenities as a library for the workers.
  53. As early as 1855, Franklin Fairbanks had applied his horticultural interests to selected areas of the grounds of the Fairbanks Scale Works in the Fairbanks Village of Saint Johnsbury, Vermont. Gradually by 1884 he had employed contour planning on a large scale to this village. However, while it stands as a

- prime example of the use of village improvement principles similar to those Andrew Jackson Downing espoused as editor of *The Horticulturist* in 1850, the village plan does not seem to employ the full range of design elements as a single, integrated plan as at the Howland Mill Village. For more on Fairbanks Village, see Garner, *Model Company Town*, 68–77.
54. For more on the planning of the town of Pullman, see Stanley Buder, *Pullman* (New York: Oxford University Press, 1967), 25–27. At Pullman, the scale of the enterprise was much larger than at the Howland Mills: more than four thousand acres were acquired, and the size and variety of housing accommodations also ranged from detached housing to barrack tenements.
  55. *Harper's* applauded the variety of design in individual housing units, whose diverse roof forms avoided “unbroken uniformity,” but disapproved of the fact that the lawns separating the houses from the street were always the same width.
  56. The son of a distinguished theologian, Barrows had initially been hired in 1874 as an assistant treasurer to organize the Willimantic Linen Company's finances. Quickly gaining the support of founder Austin Dunham's liberal-minded son, he became vice-president in 1877 and then president in 1882–83. See Thomas R. Beardsley, *Willimantic Industry and Community* (Willimantic, Conn.: Windham Textile and History Museum, 1993).
  57. The Willimantic mills acted as experimental workshops for the new electric light technology, and in 1882 they dispensed with the Brush arc light system and adopted Edison's “incandescent plant” throughout. Howland Mills installed “Edison wires” seven years later. See Beardsley, *Willimantic*, Chap. 4.
  58. Barrows's Irish landscape gardener, Dwight Potter, is said in particular to have been influenced by the work of Downing and Davis. For more on Barrows's influence on Willimantic see Beardsley, *Willimantic*, Chap. 3.
  59. For the 1880 period of housing development at Willimantic, see the Special Federal Census Schedules for Connecticut at the Connecticut State Library, Hartford, for 1880 under Industry; the original volumes are in Vault 11 or microfilm 317.46 fc76c10ma. See also the U.S. Government's Tenth Manufacturing Census (1880), published in 1882. For a period perspective on Willimantic see Budgett Meakin, *Model Factories and Villages: Ideal Conditions of Laborer and Housing* (London: T. Fisher Unwin, 1905). Apart from naturalistic planning, the thirty single- and double-family cottages built by the Ludlow Associates in Springfield, Mass., 1879–81 rank among the best nineteenth-century workers' housing. Folio-sized plates appear in Carroll D. Wright, “Report on the Factory System of the United States,” bound with the 1880 U.S. manufacturing census.
  60. See Lawrence Gross, *The Course of Industrial Decline: The Boott Cotton Mills of Lowell, Massachusetts, 1835–1955* (Baltimore, Md.: The Johns Hopkins University Press, 1993), and James E.

Vance, Jr., *The Continuing City: Urban Morphology in Western Civilization* (Baltimore, Md.: The Johns Hopkins University Press, 1990), 83–85. Company-owned housing still accommodated one-quarter of the Boott Mill employees in 1888–91. Set policies governed the conduct of both residents and keepers, and the agent was free to exercise his power as he saw fit. Gross has noted, “Continued provision of housing allowed the agent, if he wished, to extend his power into the lives of the worker while in the community. . . . Eviction remained [agent] Cumnock’s ultimate rebuke. . . . Standards were based on Cumnock’s beliefs, not work-related issues. . . . Despite the inherent difficulties of landlordism, Cumnock . . . [used] his position as an opportunity to ‘purify the corporation.’”

61. Ely, “Pullman: A Social Study,” 452–66; resident quoted in Buder, *Pullman*, 99. Written criticism of the Pullman experiment had begun by 1885. See Buder, *Pullman*, 86–92.
62. In 1883 George Pullman lured Barrows away from Willimantic to aid in the further planning of his extensive industrial site for the Pullman Palace Car Company as its vice-president. Pullman hoped that the ideal workers’ community—with its lake vista and picturesque gardens in the public square—would help to ease worker unrest, but the disastrous strike at Pullman in 1894 proved otherwise. See Beardsley, *Willimantic*, 48. Barrows resigned from Pullman on Dec. 5, 1884, and is suspected of having told Johns

Hopkins University professor Richard T. Ely about the “benevolent feudalism” at Pullman. See Richard T. Ely, “Pullman: A Social Study,” *Harper’s New Monthly Magazine*, February 1885, 452–66. Buder, *Pullman*, 102, 104, makes reference to a Walter E. Barrows, not William E.

63. Thomas Beardsley, interview with author, Oct. 9, 1995, Willimantic, Conn. The author is indebted to Beardsley for the tour of the Willimantic “Oaks” and surrounding sites he gave to me and my students from the University of North Carolina at Charlotte. See also Beardsley, *Willimantic*, 33.

The association of gardening with social harmony and good moral standing within a community was a product of the midcentury village improvement movement, whose spokesman was the Reverend Birdsey Grant Northrop of Connecticut. In his *Rural Improvement*, Northrop recommended gardening as a way to create “better factory surroundings . . . cultivate public spirit and town pride [and] secure better hygiene conditions” and to make “factory buildings and tenement houses inviting, comfortable, and healthful.” In short, gardens in industrial settings were believed to rectify the image of industrial towns, to promote health and social interaction, and—as an alternate to owning a house and lot—to ally management and labor in the responsibility of village improvement. Barrows even placed exotic plants and stained glass in Mill No. 4 at Willimantic to soften the distinction between home and work. For the connection between these

- ideas and the “village improvement movement,” see Handlin, *American Home*, 94, 115–16. For a large-scale example of the achievements of village improvement as it came to represent industrial enlightenment and the maintenance of social and environmental harmony, see Garner, *Model Company Town*, 62–65, 68–77, on Fairbanks Village in Saint Johnsbury, Vt.
64. Beardsley, *Willimantic*, 35–36. Other mill villages of the era offered philanthropic architecture as an opportunity for self-improvement for their employees. Hazard Memorial Hall in Peace Dale, R.I.; Cheney Hall in South Manchester, Conn.; the Fairbanks Museum in St. Johnsbury, Vt.; and the Town Hall and Bancroft Memorial Library in Hopedale, Mass., were designed as community facilities. Free libraries were built for factory employees at the Fairbanks Scale Works in Saint Johnsbury and the Ames Tool and Shovel Company of North Easton, Mass.
  65. Beardsley, *Willimantic Industry and Community*, 39. The phrase “social alchemists” was used by Daniel Pidgeon, English engineer and travel writer, in his book *Old World Questions and New World Answers* (London: Kegan, Paul, Trench and Company, 1884). Pidgeon had visited Willimantic in the spring of 1883 in time to view Barrows’s social experiment.
  66. Gould, *Eighth Special Report*, 328; Beardsley, *Willimantic Industry and Community*, 37–40.
  67. Gould, *Eighth Special Report*, 328. According to Beardsley in a personal interview, the “objectionable nationalities,” in the eyes of American workers of English descent, were probably Irish and French-Canadian workers.
  68. Gould, *Eighth Special Report*, 328.
  69. *Ibid.*, 326–27. Single male operatives were charged \$4.00–\$4.50 a week for board, while day boarders paid \$1.00 for five meals. The proprietor chose a person to operate the premises in exchange for rent and all profits accrued.
  70. *Ibid.*, 326. “Capital and Labor in Harmony. Howland Mills Held Up as a Model by the Cleveland Plain Dealer,” reprinted in *The Evening Standard*, Feb. 25, 1891 stated, “These homes are sold to operatives who desire to purchase on reasonable terms,” but Gould noted in 1895 that the cottages already built were needed for persons in the employ of the corporation and were rented instead.
  71. French industrialist and philanthropist Jean Dollfus and Josiah Quincy of Massachusetts had also developed organizations to help workers buy homes on easy terms. Quincy’s Homestead Clubs were Boston’s earliest home-loan savings societies. Dollfus founded the Mulhouse Workingmen’s Dwellings Company in France in 1853, which included a building and loan association and model houses designed by architect Emile Muller. Dollfus sold these houses rather than renting them. A proper system of easy home-financing extended to the industrial workforce remained an exception well into the twentieth century. In 1905, Gary, Indiana coupled a home-financing plan with sensitive town planning and was one of those

exceptions. See Garner, *Model Company Town*, 112, 149.

72. In September 1883, Olmsted designed the grounds of the Hawthorn Street estate of Edward D. Mandell, a director for Wamsutta Mills. These plans are in the Frederick Law Olmsted Historic Site, Brookline, Mass., Job #672, and correspondence documenting the project is in Library of Congress, Manuscript Division. In all, Olmsted's firm proposed or undertook six projects in New Bedford. Only two are coeval with the Howland Mill—the Mandell estate and a May 1893 contract for specifications for a driveway and walks for the Frederick Grinnell estate on County Street between Bedford and Orchard streets (Job #1381). Charles Eliot produced a landscape design for the extensive estate of New Bedford attorney James D. Stetson between 1883 and 1890.
73. A. J. Downing in his 1844 *Treatise on the Theory and Practice of Landscape Gardening* wrote of New Bedford, "There is scarcely a place in New England where the pleasure grounds are so full of variety." In 1846 George Howland, Jr., John Howland, Abraham H. Howland, and William D. Howland's father Matthew signed the Articles of Intention for the New Bedford Horticultural Society, now in the collections of the New Bedford Free Public Library.
74. The proposal made to the New Bedford Park Commission "by one of our most prominent citizens" (likely William D. Howland) was to use thirty acres of marsh land as a dumping ground for twenty years as a business investment for

the city and then convert it to a park. Its estimated worth was twenty thousand dollars, but it was never built. See undated minutes, New Bedford Park Commission, after June 1894, 3.

The concept of a system of pleasure grounds and parkways to refresh urban populations extended back to Olmsted and Calvert Vaux's works in New York City's Central Park and Brooklyn's Prospect Park beginning in 1853. Olmsted's most inclusive plans for sylvan improvement of a metropolitan region were realized in the Buffalo and Boston park systems. In the Boston plan of about 1881, the parkway system was conceived of as a way of relieving a health menace tied to water drainage in the environs of Boston and of providing a convenient and pleasant passageway from the city to the suburbs. See Laura Wood Roper, *FLO: A Biography of Frederick Law Olmsted* (Baltimore, Md., and London: The Johns Hopkins University Press, 1993).

75. "Experiments with Mill Villages," Feb. 4, 1922, *Boston Globe* Scrapbook.
76. On another city engineering map of the same year, the park is called "Clark's Point Park." On the transformation of Clark's Point, see Ellis L. Howland, "Hazelwood, History of the City's New Park on Clark's Point" and "How Joseph Congdon's Industry Carved Out Its Beauty" *Standard Times*, July 27, 1901, and June 21, 1902. Special thanks to Joan Barney, Special Collections, New Bedford Free Public Library, for forwarding copies of these citations. In 1840 banker and naturalist Joseph

Congdon had built two stone buildings, one a Gothic cottage and the other a barn that show the influence of Downing's design principles, in the area later proposed for the marine park. Congdon transformed eighteen acres of forested land into a park-like setting with vantage points of the bay and created an orchard and a greenhouse. The Howland family purchased the north part of the estate in 1865. Rachel Howland summered in the converted stone barn, and William D. and his family lived in the other cottage after his father passed away in 1884.

77. At the suggestion of Olmsted, Olmsted and Eliot, the New Bedford Park Commission was to ask the city to purchase about 160 acres—the seventy acres of the Poor House Farm, about sixty acres of federal fort property at Clark's Point, and about twenty-eight acres of private land—for park purposes and to link a citywide park system. Charles Eliot advised the city to secure all beach rights around the marine park as well.
78. This June 7, 1894, proposal by Olmsted, Olmsted, and Eliot was also lost. A typed facsimile with an illustration found its way into a miscellaneous file in the Building Permits Department at New Bedford City Hall. John Truitt, my teaching assistant, aided in locating it. There is no record of this plan at either the Olmsted National Historic Site or in the Library of Congress.
79. Olmsted, Olmsted and Eliot to the New Bedford Park Commission, June 13, 1894. The communication was submit-

ted and approved by the Board of Aldermen on December 13, 1894.

80. The parkway scheme was similar to the one the firm had designed for Boston but predated the plan Eliot and journalist Sylvester Baxter developed for Boston's metropolitan area. The New Bedford plan differed from the Olmsted firm's somewhat earlier plan for a marine park in South Boston (begun in 1869 and listed in February 1891 as "City of Boston, Plan of a Proposed Aquarial Garden") in that it intentionally linked the city's parks to its burgeoning industrial context. Planned in 1892, the South Boston park connected the marine park by a strandway to a residential area of Dorchester. See the eighty-three documents dating 1869–96 related to Job #926, Marine Park, Boston, and Job #931, Strandway, South Boston, Olmsted National Historic Site. On the Olmsted firm's proposal for this marine park, see undated minutes, New Bedford Park Commission, submitted sometime after June 1894, 1. I have since made copies of these minutes and the Olmsted correspondence regarding the New Bedford system of parks and placed them in the F. L. Olmsted Historic Site. They will be included with Job No. 01810 for the New Bedford Park Commission.

John Olmsted's plan has not previously been acknowledged. The lost plan came to light on a research trip to the New Bedford Free Public Library with the help of Tina Furtado, assistant librarian in special collections, and Todd Williams, my research assistant. See "The Late John C. Olmsted and the

City's Park System," Feb. 29, 1920, *Boston Globe* Scrapbook, New Bedford Free Public Library. In the proposal, the city was to buy up the entire waterfront area outside the Rodney French Boulevard (at an estimated five to ten thousand dollars) to preserve the view of the Acushnet River and bay on both sides; the remainder was to be filled in with elite homes and picturesque open spaces along the four-mile Point Road diagonally across the cove from Howland's mill village—offering, in effect, tandem naturalistic landscapes of labor and leisure. Olmsted intended Buttonwood Park to include ball fields, tennis lawns, childrens' playgrounds, sand boxes, swings, a warming house for ice skating, and even sheep barns. Though no plans have yet come to light for the marine park in New Bedford other than its inclusion in a planned system of parks, the idea continued to be discussed in the local newspapers well into the 1920s. By that time, however, a marine park was proposed for land to the northeast, abutting the Acushnet River near the bridge from New Bedford to Fairhaven, not for Clark's Point.

81. Documentation of this project exists at both the Library of Congress Manuscript Division (correspondence beginning July 9, 1894) and at the Olmsted National Historic Site (three plans from 1895, job #01810). The New Bedford Park Commission also paid an additional five hundred dollars for an engineering study of the water supply. It is not clear whether the third phase of the proposal—tree planting over three years—

ever took place. This sketch is still extant at the Park Commission. In 1894 New Bedford underwent a major labor strike and felt the effects of the national depression triggered by the Panic of 1893, and it is possible that Olmsted's contributions ended with the sketch and engineering study, both completed in 1895.

82. Ruskin drew inspiration from the Bible (a form of Christian Socialism) and the social economic principles of Thomas Carlyle and Robert Owen. For selected discussions of Ruskin and Morris on the issues of political economy and the treatment of the "working producing class," see George P. Landow, *Ruskin* (Oxford, Eng.: Oxford University Press, 1985), Chap. 3; William Morris, *News from Nowhere and Other Writings* (London: Penguin Books, 1993); Charles Harvey and Jon Press, *William Morris: Design and Enterprise in Victorian Britain* (Manchester, Eng.: Manchester University Press, 1991), esp. introduction and Chap. 6; and Eileen Boris, *Art and Labor: Ruskin, Morris, and the Craftsman Ideal in America* (Philadelphia: Temple University Press, 1986). For more on the specific nature of changing management practices in America, see David Montgomery, *Beyond Equality: Labor and the Radical Republicans, 1862–1872* (New York: Random House, 1967), and Daniel Nelson and Stuart Campbell, "Taylorism versus Welfare Work in American Industry: H.L. Gantt and the Bancrofts," *Business History Review* 46 (Spring 1972): 1–16.
83. "Capital and Labor in Harmony. Howland Mills Held Up as Model by

- the Cleveland Plain Dealer," *The Evening Standard*, Feb. 25, 1891. The New Bedford newspaper reprinted the *Plain Dealer* article in full.
84. Gould, *Eighth Special Report*, 327; "Capital and Labor in Harmony." *New Bedford City Documents* 8, 1891, "Auditor's Report," indicates that sixty dollars of city funds, however, were expended to support a baseball club for the Howland Mills.
  85. Pullman too offered these cultural amenities, but he made it clear that the town operated as a business and charged fees for the use of the stables, library, and even the church. Eventually, however, the extreme example of paternalism Pullman offered was perceived by some as tantamount to modern-day feudalism and stigmatized company housing. See Ely, "Pullman: A Social Study," and Buder, *Pullman*.
  86. The large percentage of workers from Lancashire, England, had brought English socialism and union activism into the city prior to 1867. Outstanding housing, wages, and benefits were ways of tempering the urge to organize.
  87. McMullen, "Lost Alternative," 27. "Howland Mills Involved," *The Morning Mercury*, Apr. 24, 1897, 1, noted, "Mr. Howland has always been exceedingly popular with the employees" and added that he had organized and funded an "annual excursion" for them to Martha's Vineyard.
  88. *New Bedford Evening Standard*, Aug. 21, 1894; McMullen, "Lost Alternative," 28–29.
  89. For a discussion of wage reductions during the textile era in New Bedford, see McMullen, "The Coming of the Mills," 5, 8, 9, 12, and McMullen, "Industrialization and Social Change." *American Wool and Cotton Reporter*, Oct. 18, 1894, cited in McMullen, "Lost Alternative," 30.
  90. Gould, *Eighth Special Report*, 327.
  91. *Ibid.*, 325.
  92. Cash and debts receivable for the New Bedford Manufacturing Company were listed as \$36,399, the Howland Mills \$40,991, and the Rotch Spinning Corporation \$219,917. For a full disclosure of financial statements see "Howland Mills Involved," *The Morning Standard*, Apr. 24, 1897, 1.
  93. The Bennett Manufacturing Company built six mill buildings in 1889 alone. In addition, the same people were founding more than one company at about the same time and thus were tying up resources and collateral: Henry Halcomb, who with Frank R. Hadley had founded Bennett Manufacturing, just three years later created the Columbia Spinning Mill. In addition to the rapid expansion of these two yarn mills, local newspapers on April 15, 1897, revealed serious irregularities in the mills' finances, including the paying out of excessive dividends, charging expenditures to improper accounts, and falsifying indebtedness reports to state officials. In all, hundreds of thousands of dollars were embezzled, leading to the suicide of the company treasurer and the placing of the two mills in receivership. See *New Bedford Evening Standard*, April 15 and 16, June 22 and 24, and July 9, 1897.

95. Given the threat Howland's management policies on the ten-hour day and on workers' living conditions posed to the majority of other mills in the city, some foul play in connection with his disappearance, or at least with the failure of the bank (founded by his grandfather and earlier run by his father) to extend the loan, is not out of the question.
96. "Better than Feared . . . Mr. Howland Believed to Have Wandered away while Dazed," *The Evening Standard*, Apr. 26, 1897, 1.
97. *Evening Standard*, May 6, 1897.
98. *New Bedford Evening Standard*, Feb. 17, 1898; McMullen, "Lost Alternative," 36–37.
99. Because the New Bedford park plan was unknown to scholars, Garner noted that "no other company town or, for that matter, small industrial town had conceived such an extensive park system. . . . The Hopedale commission provided him the opportunity on a small scale to do what Olmsted and Eliot did in Boston with the Muddy River development, which emerged as the nation's first regional park system in 1892." In fact, the Hopedale commission more likely provided Manning the opportunity to carry out what Olmsted and Eliot had envisioned for a New Bedford park system at least as early as 1894. See Garner, *Model Company Town*, 192–94. The workers' village Olmsted, Olmsted and Eliot designed for the Apollo Iron and Steel Company at Vandergrift relied heavily on contour planning as well, though its hierarchical arrangement of mill agent and owner housing and its use of a rail system primarily to ship iron, steel, and lumber made it more akin to the Oaks than to Howland Mill Village. The Howland village may also have influenced later naturalistic planning schemes such as Grosvenor Atterbury's Forest Hills Gardens (designed in 1919 by Frederick Law Olmsted, Jr.) and Earle Draper's 1925 plan of Chicopee, Georgia.
100. For a study of Hopedale see Garner, *Model Company Town*, esp. 152–56.
101. See Garner, *Model Company Town*, 149, fig. 32. At Hopedale, the actual laying of the sewer line along Union Street was not begun until 1889, but by 1897 almost all of the houses were connected with "modern conveniences."
102. For reports of the reorganization committees see *New Bedford Evening Standard*, May 25, 1897.
103. The New England Cotton Yarn Company also purchased the failed Bennett Manufacturing Corporation and the Columbia Spinning Mill—all spinning mills—which indicates the growing tendency toward corporate capitalism in New England textiles. Similarly, the British conglomerate Atlantic Thread Company (ATCO) absorbed the Willimantic Linen Company in 1898 along with other New England cotton mills, including some in New Bedford. With the consolidation move of ATCO came increased resistance to efforts of the American Federation of Labor to organize its employees. See Beardsley, *Willimantic Industry and Community*, 40–41, and Boss and Thomas, *New Bedford*, 132.

104. "50 Years Ago," *Sunday Standard Times*, July 6, 1958, stated that in July 1908 the New England Cotton Yarn Company sold to Joseph T. Kenney more than four thousand rods of land and that "a considerable section of the area was later to become the site of the Sharp Mill." The 1910 Walker City of New Bedford map shows that at this time the Sharp Mill was still called the New England Cotton Yarn Company. Kenney was indicated as owning more than five full city residential blocks bounded by Dartmouth, Sidney, Bolton, and Winsper streets. The article stated that New England Cotton Yarn retained possession of the fifty Howland cottages when the other part of the property was sold. According to the New Bedford Record of Building Permits, builder Joseph Motta built six three-unit tenements in the former Howland parcel in 1914–15 alone.
105. See "The Late John C. Olmsted and the City's Park System," *Boston Globe Scrapbook*.
106. The Soule Mill, designed in 1901 by Boston firm Lockwood, Greene, and Company and the first of the twentieth-century New Bedford textile mills to be incorporated, ended a five-year hiatus during which no new textile mills were incorporated in the city.
107. "Experiments with Mill Villages."
108. The Howland Mill Village became a Historic District on the National Register of Historic Places in 1997.
109. As reflected by the Record of Building Permits, the shift in New Bedford to the conventional hipped-roof three decker was underway by 1894. Its full expression, with bay windows and three piazzas, was not standard until about 1907. Prior to this time, the flat-roof and gable-ended "three tenements" were prevalent. The high point of tenement housing in New Bedford, not surprisingly, was 1910, the same year that the greatest number of mills were incorporated in the city. In 1910, 639 houses were built containing 1812 tenements. Of that number, 290 were three-deckers that provided 870 tenements. During the year of the second-largest building activity, 1919, 269 dwellings were built containing only 396 tenements, and only one of these 269 was a three-decker. See "Building Statistics for the Year," *Standard Times*, Jan. 1, 1920. I owe special thanks for the tireless help of John Rosa III, Zoning Officer, in the New Bedford City Deputy Building Commissioner's Office for allowing me access, on repeated occasions, to the Record of Building Permits from which the documentary evidence of the three-decker largely has been compiled. For more on the New Bedford three-decker see my forthcoming "Cultural Weathering: Vernacular Architecture as Cultural Production (The Portuguese-American Transformation of the New Bedford, Massachusetts Three-Decker Flat)," *Journal of Architectural Education* (Fall 1998).