

INDIVIDUAL INVENTORY FORM

NHDHR INVENTORY # CON0289

Name, Location, Ownership

1. Historic name Ford & Kimball Foundry
2. District or area 19th C. Manufacturing/South Main
3. Street and number 39 1/2 S. Main St./12 Hills Ave.
4. City or town Concord
5. County Merrimack
6. Current owner State of New Hampshire

Function or Use

7. Current use(s) Commerce/Trade: Warehouse
8. Historic use(s) Industry: Manufacturing facility

Architectural Information

9. Style ---
10. Architect/builder unknown
11. Source ---
12. Construction date 1869
13. Source Concord Eve. Monitor, 17 April 1869
14. Alterations, with dates c.1940 - removal of warehouse;
1950 – single-story addition at rear of former foundry,
remodeling including installation of flat roof
15. Moved? no ☒ yes ☐ date: ---

Exterior Features

16. Foundation ---
17. Cladding Brick
18. Roof material Tar & Gravel
19. Chimney material Brick
20. Type of roof Flat
21. Chimney location West exterior
22. Number of stories 2
23. Entry location multiple
24. Windows double-hung 6/6 ; steel
Replacement? no ☐ some ☒ date: c.1940

Site Features

25. Setting Downtown business district
26. Outbuildings former pattern room, machine room
27. Landscape features railroad spur



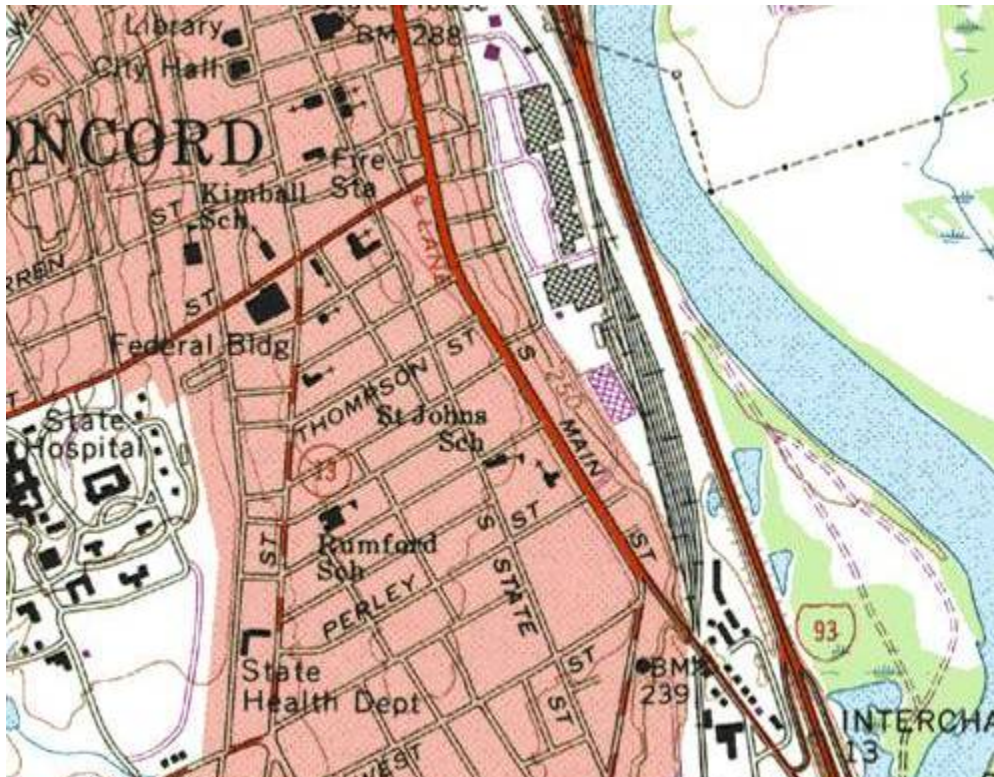
35. Photo #1 Direction: SE
36. Date March 2012
37. Reference #: CON0289 1

28. Acreage 0.96 acre
29. Tax map/parcel # 34/4/3
30. UTM reference Z19 4786170N 294044E
31. USGS quadrangle and scale Concord 1:24000
- Form prepared by
32. Name Lisa Mausolf
33. Organization Concord Heritage Commission
34. Date of survey February-March 2012

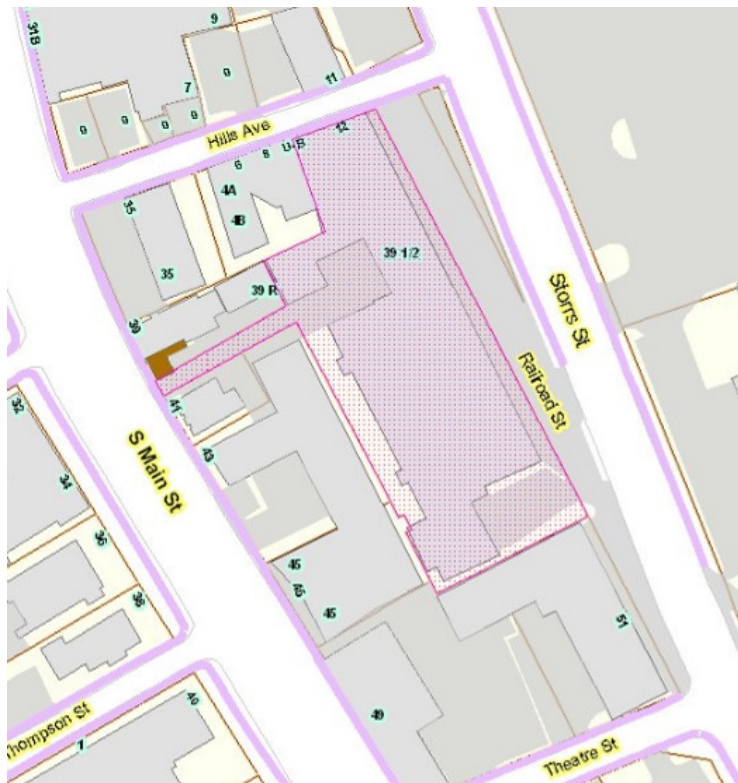
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39. LOCATION MAP:



40. PROPERTY MAP:



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41. Historical Background and Role in the City's Development:

In 1865 Theodore H. Ford and Benjamin A. Kimball established an iron and brass foundry on this site east of South Main Street. They produced all kinds of iron and brass castings and iron fences but specialized in the manufacture of car wheels for the railroad. Theodore Ford (1820-1892) was the son of William P. Ford who operated a foundry in the North End manufacturing stoves, sinks and plows. Theodore and his father dissolved their partnership in 1865 at which time Theodore opened a new foundry, Ford & Kimball, here with Benjamin Kimball.

Benjamin Ames Kimball (1833-1920) was to become one of Concord's most prominent citizens. He was born in Boscawen and his father died when he was just a year old. Kimball attended Concord High School and received a Bachelor's Degree from the Chandler Scientific Department of Dartmouth College in 1854. He was hired by the Concord Railroad as a draftsman and went on to become superintendent of the locomotive department and master mechanic before resigning to form Ford & Kimball in 1865. Later he had a long history in railroad service and served on the board of directors of many of the state railroads. In 1873 he became a director of the Manchester & North Weare Railroad. In 1879 he was elected a director of the Concord Railroad and was annually reelected to the board of directors of both that railroad and its successor, the Concord & Montreal, until at least 1918. He was also connected with the banking interests of Concord for many years, served on the Concord Board of Water Commissioners and the State Constitutional Convention and was one of the founders, director and president of Cushman Electric Company. In 1878 Kimball purchased the house across the street at 44 South Main Street and made extensive alterations. The brick Romanesque Revival mansion is now part of the Capitol Center for the Arts. (Kimball bequeathed the house to the State of New Hampshire to be used as an executive mansion but the State declined to accept the gift and the building was subsequently sold to the Masonic fraternity and remodeled into a shrine temple.)

Ford & Kimball's original foundry was heavily damaged by fire in July 1866. About half of the firm's valuable patterns were saved. The fire also damaged the machine shop, a barn on the north side of the machine shop, a large shed and a dwelling house to the west occupied by Benjamin Kimball. At the time of the fire Harvey Morgan was building a carriage shop on an adjacent property. That building was not damaged by the fire.

In April 1869 plans were made to erect a new foundry building. The foundation had been put in the previous fall. The structure was to be 220' x 44' and a single story (15' 10" high). It was to be constructed of brick with a flat roof and at the north end was an ell for a copper shop. The new foundry was to be lit with 43 windows, 18 of which would contain 60 lights. At the same time plans were made to build a new machine shop (43 S. Main Street) north of the shop then occupied by Dunklee & Tilton (45 S. Main Street). The two-story building was to measure 72' x 41' (the present dimensions of 43 S. Main). The newspaper reported that "Messrs. Ford & Kimball are full of work in their foundry, employing at the present time 37 hands. A large part of their work is railroad castings of all descriptions. Six hands are constantly employed in casting car wheels, of which 16 a day are turned out, averaging 500 pounds each. The average length of time which a car wheel is used, is two years. The wheels manufactured by these gentlemen have an excellent reputation, and are in great demand. Another very important branch of their business is the casting of bedstead fastenings, of which they turnout from 12 to 18 barrels per month, averaging from 600 to 700 pounds per barrel. They also do a large business in iron fences, and small job work." (*Concord Evening Monitor*, April 17, 1869). In 1880 the Ford & Kimball used five to six hundred tons of iron and steel annually, consumed 300 tons of coal in the manufacture and used a 40 horsepower engine.

Ford & Kimball's property encompassed nearly the entire block bounded by South Main Street, Hills Avenue, Storrs Street (formerly Railroad Street) and Chandler Street (now Theatre Street). The foundry office was located in what is now 41 South Main Street [photo 11] which was built between 1879 and 1889. Ford & Kimball also owned 43-45 South Main Street and leased space to other industries including machine makers Dunklee & Allen, John White, and Cushman Electric at 43 South Main Street and organmaker Abraham Prescott and a number of woodworkers at 45 South Main Street. The W.S. Davis & Son Carriage Factory was located on the site of what is now 49 South Main Street but was demolished in the early 20th century (Hengen 2009).

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In 1887 a New York publication offered the following description of the Ford & Kimball operations: "The plant of this firm covers an area of 300 x 400 feet, situated on the line of the railroad, and comprises a foundry measuring 65 x 225 feet; two pattern shops 25 x 50 feet, two stories each; a brass shop 25 x 40 feet, and a general cleaning shop 30 x 175 feet. The cupola of the foundry has a capacity of ten tons, and twenty car wheels are cast, on the average, per day. The motive power is furnished by a 50 horse power engine and boiler, and employment is given to from fifty to sixty skilled hands. The car wheels produced by this responsible house are made from the firm's own patterns and designs, and are considered as standard the country over, being unsurpassed for strength, durability and reliable workmanship by those of any rival concern in this or any other country. Plans, specifications and estimates are promptly furnished for general brass and iron foundry work, and no pains or skill is spared to fulfill the expectations of patrons" (*Leading Manufacturers*, 1887, p. 195). In 1899 production at the Ford & Kimball Foundry was further expanded to 24 hours a day to meet the needs of the Boston & Maine Railroad which had just commenced making their own freight cars at the Concord shops (*The Foundry* v.15, 1899).

After Theodore Ford's death and Benjamin Kimball's retirement, Ford & Kimball was overseen by their sons, Jerome Ford and Henry Ames Kimball (1861-1919). By the early 20th century the railroad had already begun a slow, steady decline and this was no doubt reflected in the operations at Ford & Kimball foundry. In the 1920s Ford & Kimball began to subdivide and sell some of its excess property. Land along Chandler Street (now Theater Street) was sold by Ford & Kimball in 1926, as was what is now 43 South Main Street. The property at 41 S. Main Street (formerly the Ford & Kimball Office) was sold in 1929 and 45 S. Main Street was sold in 1931.

The last entry for the Ford & Kimball Foundry appears in the 1940 Concord directory. In 1941 Ford & Kimball sold what was left of the foundry to the State of New Hampshire for \$15,000 (Book 588, Page 183). The State subsequently purchased the property at the southwest corner of Hills Avenue and Railroad Avenue in 1943 from the Foster Family (Book 600, Page 284) and 39 S. Main Street from the Dennis Sweeney Estate in 1950 (Book 676, Page 136). The long single-story warehouse structure which stood to the west of the foundry and east of the machine shop (43 S. Main) was removed. The former foundry was used for liquor storage while the former pattern room at the north end was used for the storage of state documents. In 1950 the State renovated the former foundry, removing the central projection and flattening the roof. A new single-story concrete block addition was constructed to the rear (west). The building is now used for storage.

42. Applicable NHDHR Historic Contexts:

Iron smelting and founding, 1715-present

43. Architectural Description and Comparative Evaluation:

This property includes various remnants of the former Ford & Kimball Foundry complex. At the north end of the complex is a brick, gable-roofed building measuring approximately 37' x 35' which originally served as a Pattern Room [photos 2-3]. The building presents two stories to the west with an additional lower level visible on the east elevation. There are six bays on the east and west elevations although a number of the windows on the first floor of the west side have been filled with brick as have all of the openings on the south gable end which displays several diamond-headed tie rods. The remaining windows consist of wooden double-hung 6/6 sash and are capped by segmental lintels constructed of two rows of header brick. There is a vertical board door on the east side; another larger loading bay has been filled with brick. The building displays a dentil brick cornice which ends in shallow returns on the gable ends. To the east of the Pattern Room is a single-story brick connector [photo 4] which displays remnants of two large semicircular arched openings (now bricked in with a smaller door inserted), a pedestrian door and three 6/6 windows. A large corbel cap chimney emerges from the flat roof. According to the 1874 Sanborn map, the western portion of the connector was originally an open shed and the room to the east was a brass foundry.

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At the south end of the property, to the east of 45 S. Main Street, is a single-story brick building measuring about 38' x 46' [photo 5]. This structure was located at the south end of the long warehouse and originally served as a machine shop. The remainder of the warehouse was removed c.1950. The building is oriented with gable ends to the north and south and is fronted by a single-story, flat-roofed section on the east and south ends. The entrance is located at the south end of the east elevation and consists of a vertical board door with granite sill and three row header segmental brick lintel. There are four elevated window strips on the east wall. One has been filled with vents, the others have 4 x 2-light panels. There is an elevated door on the north gable end. The 1875 Birds' Eye View (see p. 8) shows the original east façade (now hidden by the later front addition) had five openings including a central arched door flanked on either side by two rectangular windows with two smaller windows above.

The former foundry is a two-story, long, narrow brick structure extending 242 feet in a southerly direction from just east of the Pattern Room. It now has a flat roof but originally had a taller central section and ventilators along the ridge of the shallow gable roof (see Birds' Eye View, p. 8). The building was remodeled about 1950 by the State of New Hampshire at which time the flat roof was installed. On the northern portion of the west elevation there are several newer 18/18 windows covered with metal grills, a pedestrian entry and a truck bay. To the south the wall is punctuated by small, elevated windows with granite sills and metal grills. A single-story brick lean-to fronts part of the building, its roof is punctuated by a brick smokestack. A low concrete addition measuring 175' x 57' is located to the west of the foundry building. It was constructed in 1950, has a flat roof and is without window openings.

The two-story east elevation of the former foundry [photos 8 & 10] facing Storrs Street (formerly Railroad Square) displays a concrete foundation. The bays are outlined by thin brick piers with decorative brick cornice work between the piers. The window openings at the north end have 18/18 sash. The central section consists of a taller first floor with small upper story windows above. The original first floor openings which contained either large windows or doors have been filled with brick and small elevated windows inserted. At the south end of the elevation there are two modern truck bays with metal overhead doors.

44. National or State Register Criteria Statement of Significance:

Criterion A: This property is eligible for the State Register, and possibly the National Register, under Criterion A. It is associated with an important local industry, the Ford & Kimball Foundry, which utilized the property from 1865 until 1940. It is one of the few remnants of the various manufactories which were located in the South Main Street area in the 19th century. Its location near the railroad provided ready access to the necessary raw materials and it was a major producer of car wheels for the railroad, another important local employer.

Criterion B: This property is not eligible for either the National or State Registers under Criterion B. Though associated with various individuals of local interest, the property lacks long-term, singular associations with any one person known to have made highly significant contributions to history.

Criterion C: This property is not eligible for either the National or State Register under Criterion C. Although several components of the complex, the Pattern Room and the Machine Shop, retain a high level of integrity for their 19th century appearance, the foundry itself has suffered a considerable loss of integrity due to alterations in the 1940s and 50s.

45. Period of Significance: 1869-1940

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46. Statement of Integrity:

The former Ford & Kimball Foundry complex retains integrity of location. Its integrity of design, materials, workmanship, feeling and association are lessened by alterations made to the main foundry building in the 1940s and early 1950s including alterations to the roofline and windows as well as the removal of the large central warehouse.

47. Boundary Discussion:

The eligible boundary would consist of that portion of the current tax parcel that corresponds to the original foundry property. It would exclude the three-story building at the southwest corner of Hills Ave. and Railroad Street that was later acquired by the State of New Hampshire and was not historically part of the foundry complex.

48. Bibliography and/or References:

Bacon, George Fox. *The Leading Business Men of Concord, and vicinity, embracing Penacook, East and West Concord*. Mercantile Publishing Co., 1890.

Concord Directories, various dates.

"Concord: The Capital City of New Hampshire", *New York Industrial Reporter*, 1900, p. 28.

"Destructive Fire", *Concord Evening Monitor*, 13 July 1866.

The Foundry, v. 15, 1899.

Hengen, Elizabeth Durfee and Gary Samson. *Capital Views: A Photographic History of Concord, New Hampshire, 1850-1930*. Concord: New Hampshire Historical Society and Heritage Concord, Inc., 1994.

Hengen, Elizabeth Durfee. Inventory form for 47-49 South Main Street (CON0501), June 2009 [On file at the NH Division of Historical Resources].

Leading Manufacturers and Merchants of New Hampshire. New York: International Publishing Co., 1887.

Lyford, James O., ed. *History of Concord, New Hampshire*. Concord: Rumford Press, 1903, 2 vols.

Merrimack County Registry of Deeds.

"New Foundry Building", *Concord Evening Monitor*, 17 April 1869.

Pearson, H.C. "Benjamin Kimball", *Granite Monthly*, September 1920, pp. 343-354.

Sanborn Insurance Maps, 1884, 1889, 1893, 1899, 1906, 1914, 1928, 1928 corrected to 1949, 1979.

U.S. Census of Manufacturers, Concord, 1850, 1860, 1870, 1880 [microfilm collection of the NH State Library].

Surveyor's Evaluation:

NR listed: individual _____
within district _____

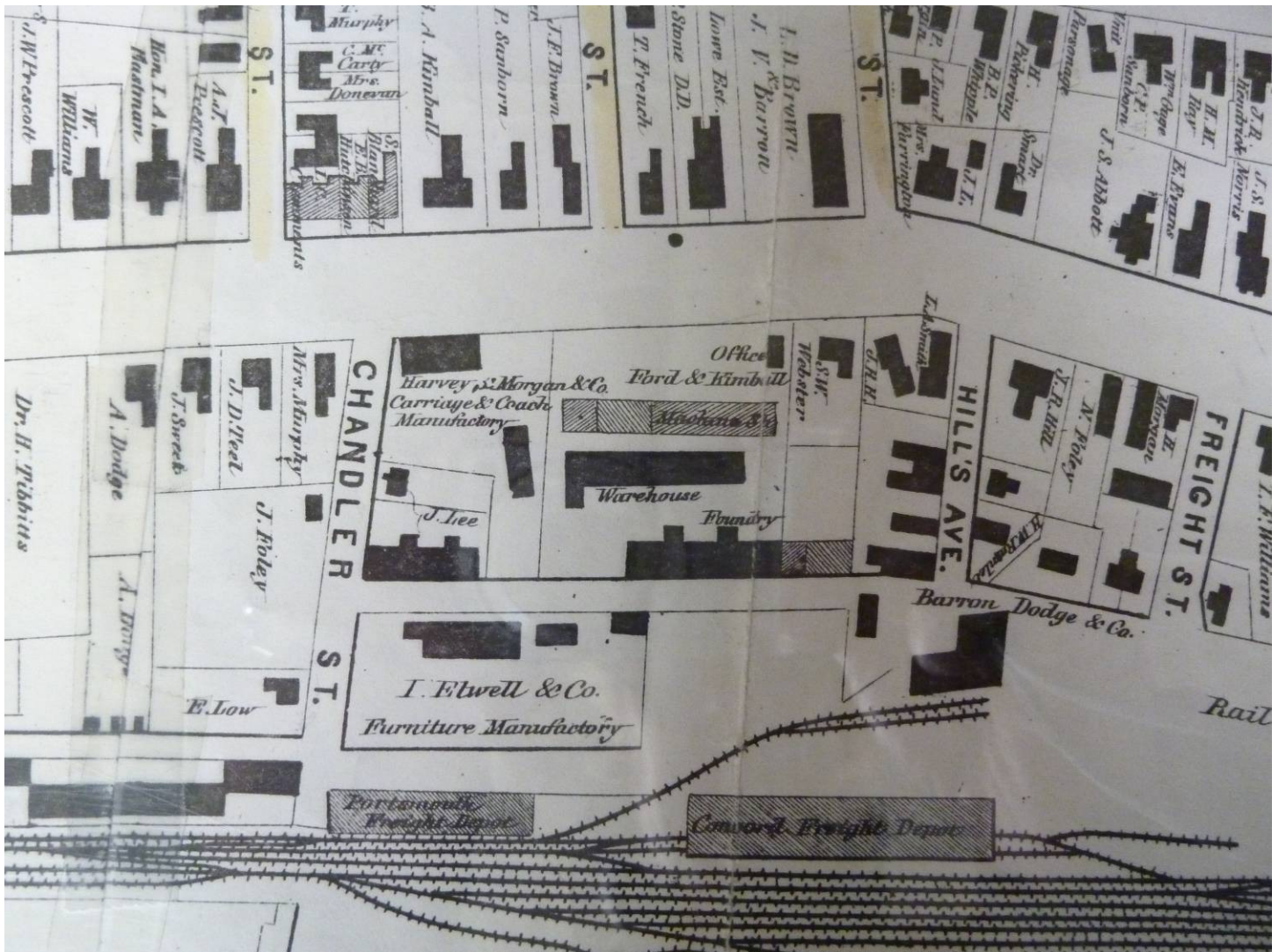
Integrity: yes (some) x
no _____

NR eligible: individual _____
within district x
not eligible _____
more info needed _____

NR Criteria: A x
B _____
C _____
D _____
E _____

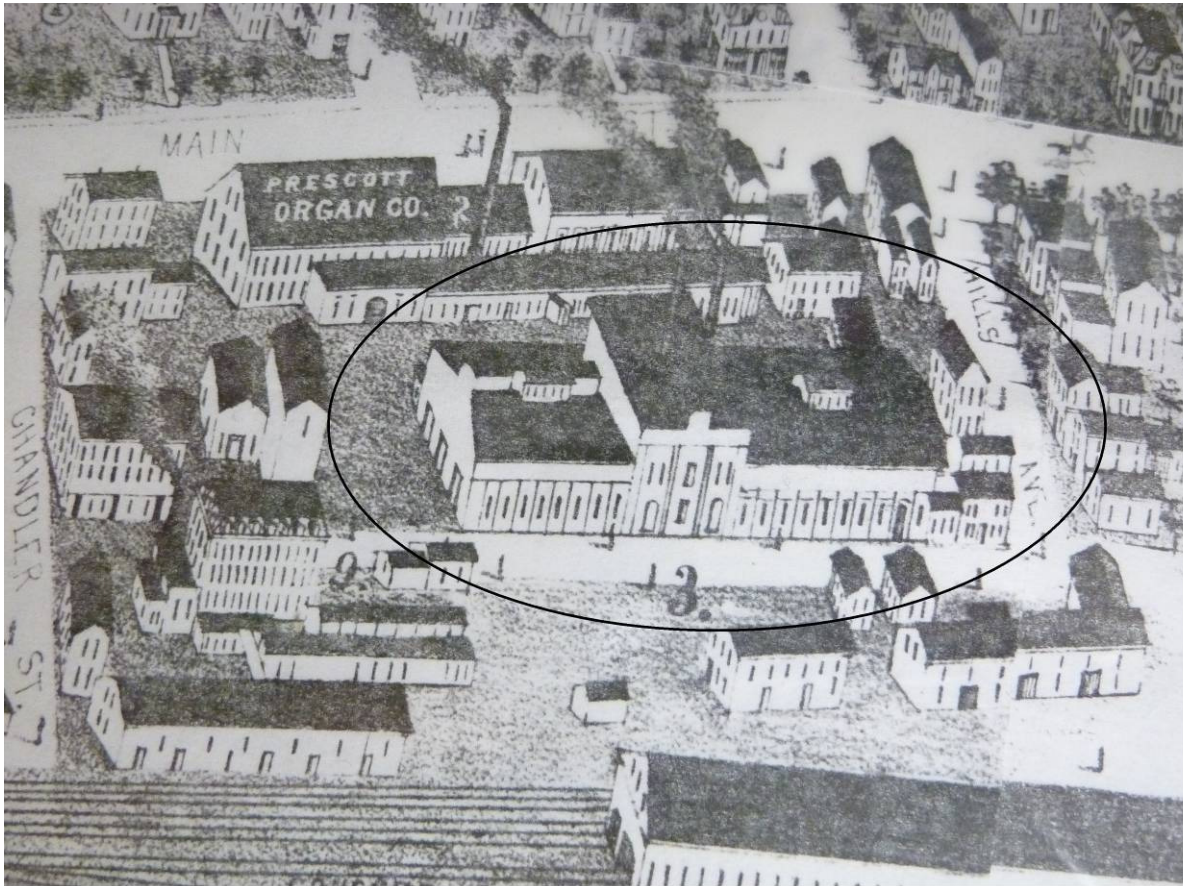
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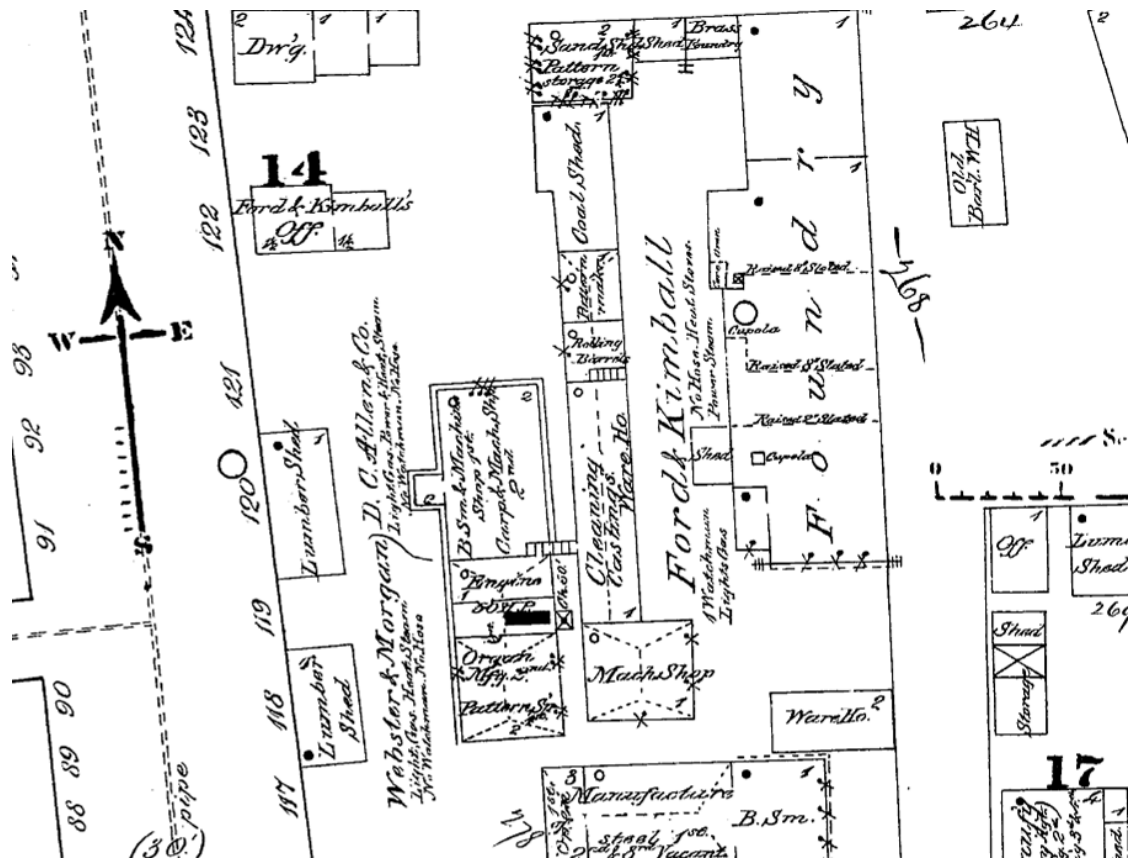
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View looking west of Ford & Kimball Foundry (circled).

Source: *Bird's Eye View of Concord, N.H., 1875*

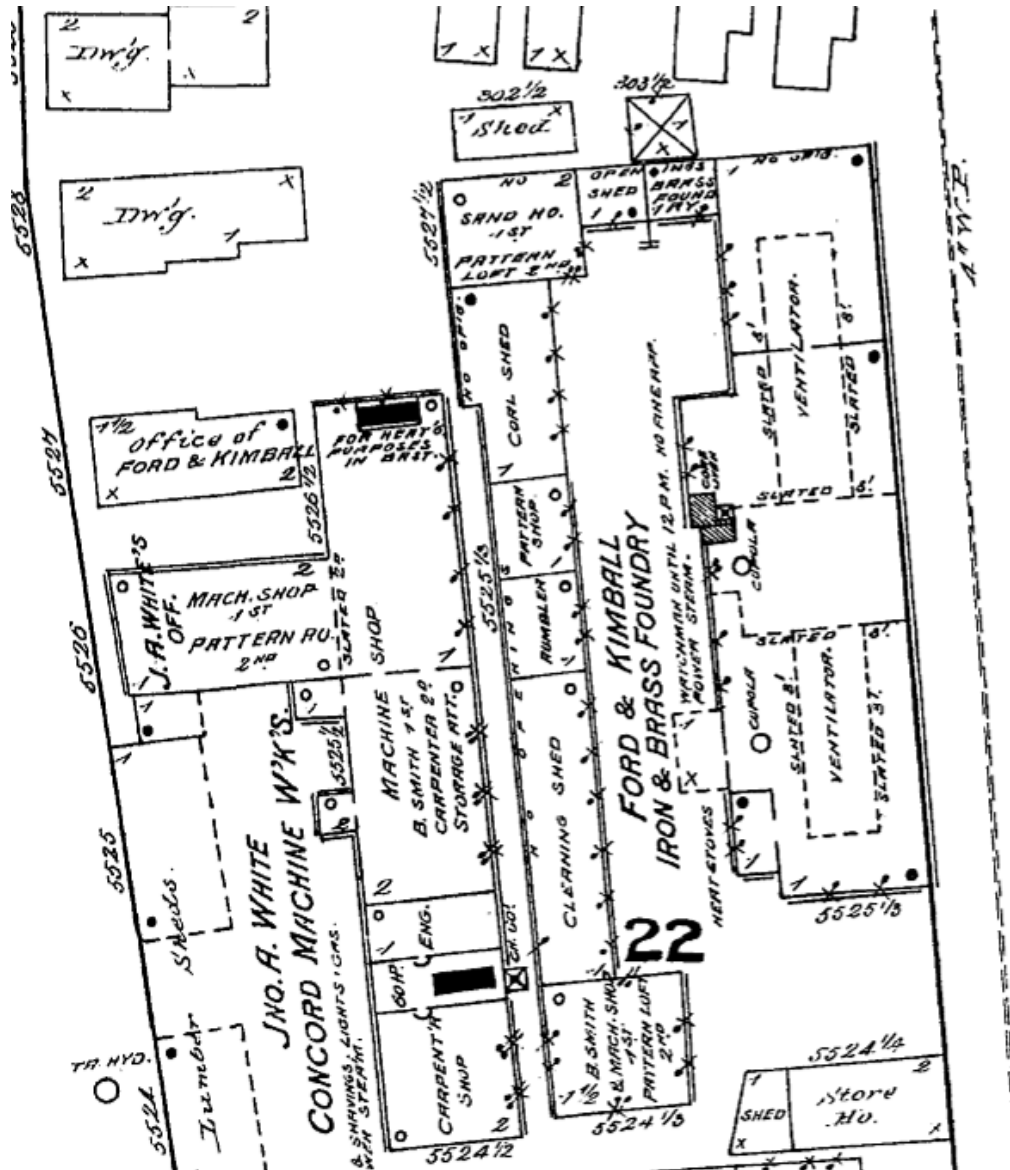
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1874 Sanborn Map

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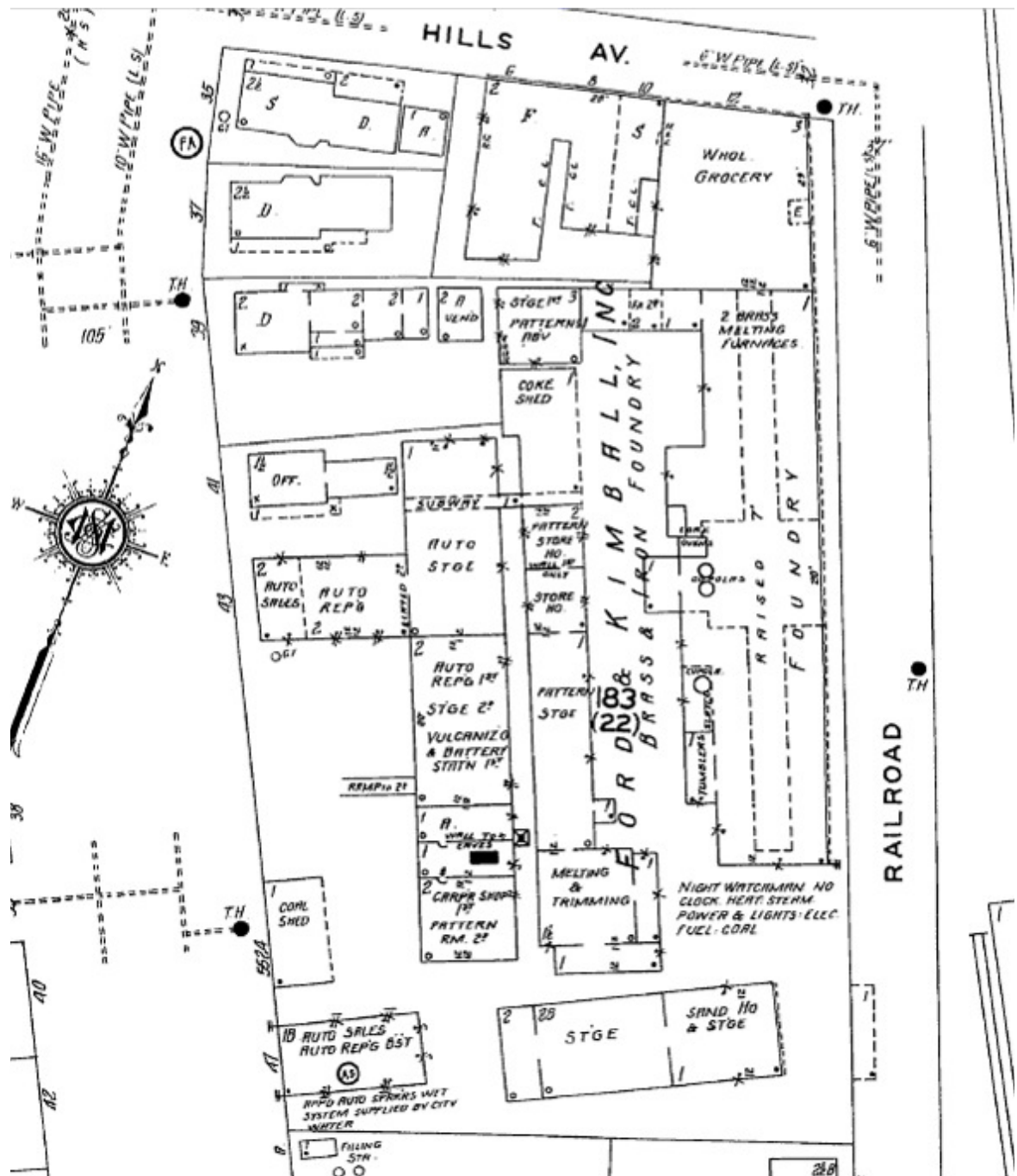
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1884 Sanborn Map

INDIVIDUAL INVENTORY FORM

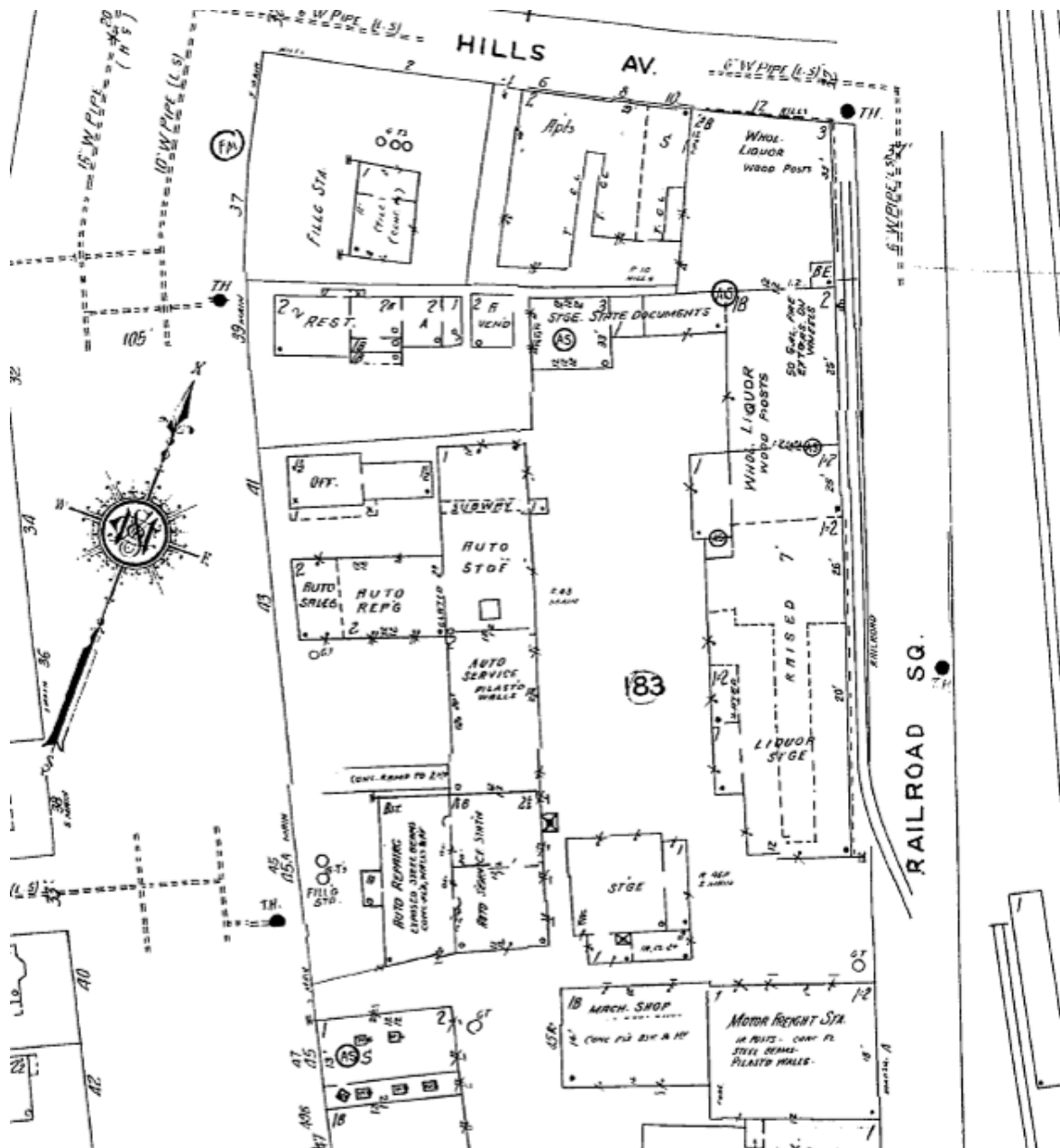
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1928 Sanborn Map

INDIVIDUAL INVENTORY FORM

NHDHR INVENTORY # CON0289

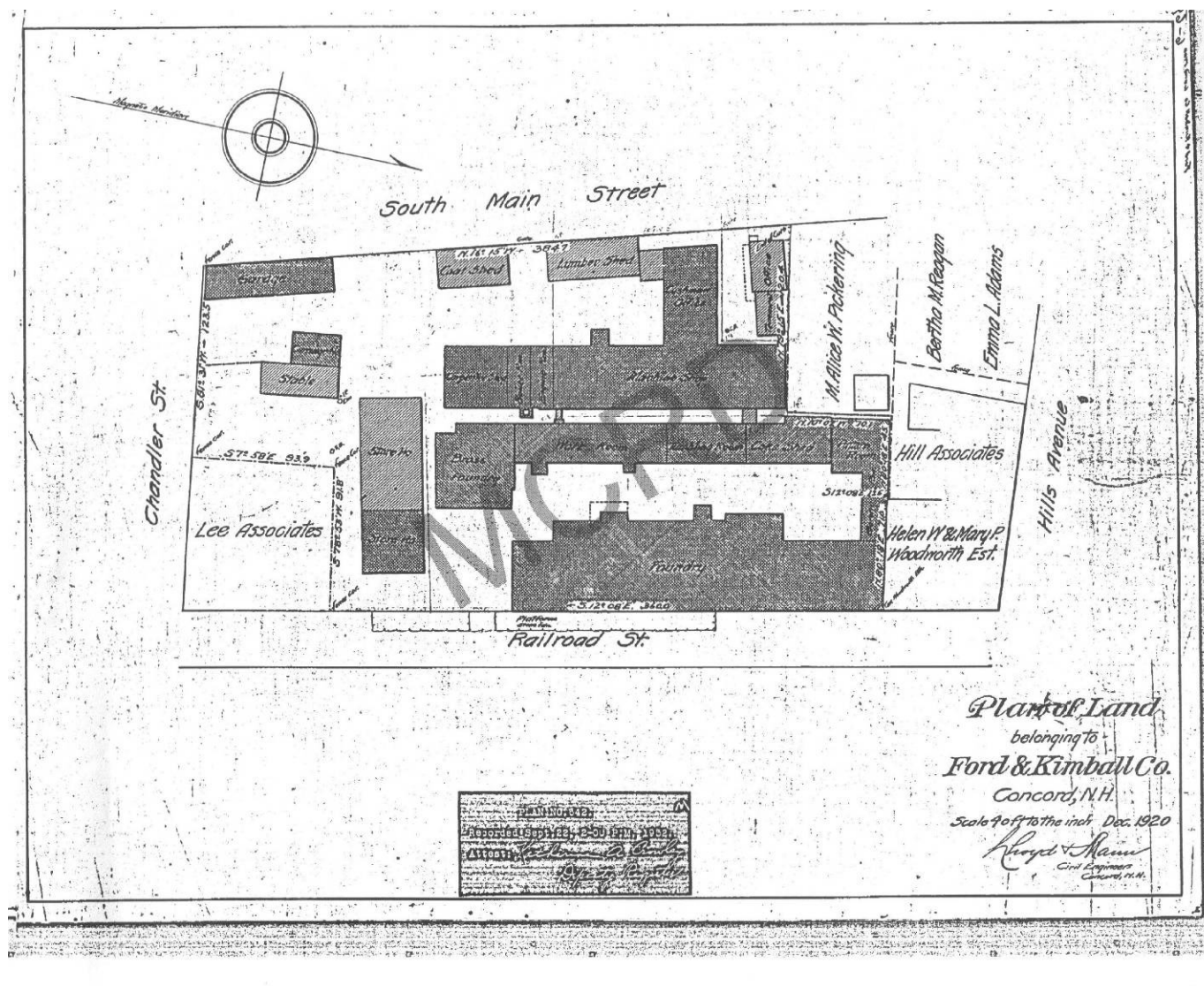


1949 Sanborn Map

Note that most of original raised roof remained intact as late as 1949.
Flat roof and single story addition to west were added in 1950.

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Ford & Kimball Co. property, 1920

Source: Merrimack County Registry of Deeds

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Date photos taken: Feb. 19, 2012



Photo # 2 Description: Former Pattern Room, west and south elevations
Digital file name: CON0289_2 Direction: NE



Photo # 3 Description: Former Pattern Room, south and east elevations
Digital file name: CON0289_3 Direction: NW

INDIVIDUAL INVENTORY FORM

NHDHR INVENTORY # CON0289

Date photos taken: Feb. 19, 2012



Photo # __4__ Description: Shed/Brass foundry, south elevation
Digital file name: CON0289_4 Direction: north



Photo # __5__ Description: Former machine shop, south and east elevations
Digital file name: CON0289_5 Direction: NW

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Date photos taken: Feb. 19, 2012



Photo # 6 Description: north end of foundry building, west elevation
Digital file name: CON0289_6 Direction: east



Photo # 7 Description: West elevation of foundry with 1950 addition visible in front right
Digital file name: CON0289_7 Direction: SE

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Date photos taken: Feb. 19, 2012



Photo # __8__ Description: Former foundry, south and east elevations (along Storrs Street)
Digital file name: CON0289_8 Direction: NW



Photo # __9__ Description: Former Foundry, south elevation
Digital file name: CON0289_9 Direction: north

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Date photos taken: Feb. 19, 2012



Photo # __10__ Description: Former Foundry, east elevation (facing Storrs St.)

Digital file name: CON0289_10

Direction: NW



Photo # __11__ Description: Former Ford & Kimball Office, now 41 S. Main Street

Digital file name: CON0289_11

Direction: NE

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Date photos taken: Feb. 19, 2012



Photo # 12 Description: historic access from Ford & Kimball Office and S. Main to foundry
Digital file name: CON0289_12 Direction: east



Photo # 13 Description: Foundry at left; Building at right (corner Hills Ave., and Storrs) not historically part of
foundry although later also acquired by the State of New Hampshire and now part of the same tax parcel
Digital file name: CON0289_13 Direction: NW

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Date photos taken: Feb. 19, 2012



Photo # __14__

Description: Building at SW corner of Hills Ave. and Storrs Street

Digital file name:

CON0289_14

Direction: SW

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I, the undersigned, confirm that the photos in this inventory form have not been digitally manipulated and that they conform to the standards set forth in the NHDHR Photo Policy. These photos were printed using an Epson Stylus Photo R2880 Printer and Epson papers and inks. The digital files are housed at my office in Reading, Mass.

SIGNED: