

A DISAPPEARING TREASURE—

BOSTON & MAINE RAILROAD CAR SHOPS, CONCORD, N.H.

Kenneth W. Milender

By 1895, THE CITY OF CONCORD, NEW HAMPSHIRE had grown into an important railroad center. Service was provided by a number of railroads reaching out from the city in all directions. Railroad promoters had long recognized the city's strategic location between Boston and northern New England and Canada, and had developed Concord into an important interchange point for a number of through-routes over the mountains of western New Hampshire to the Connecticut River Valley, Montreal, and points west.

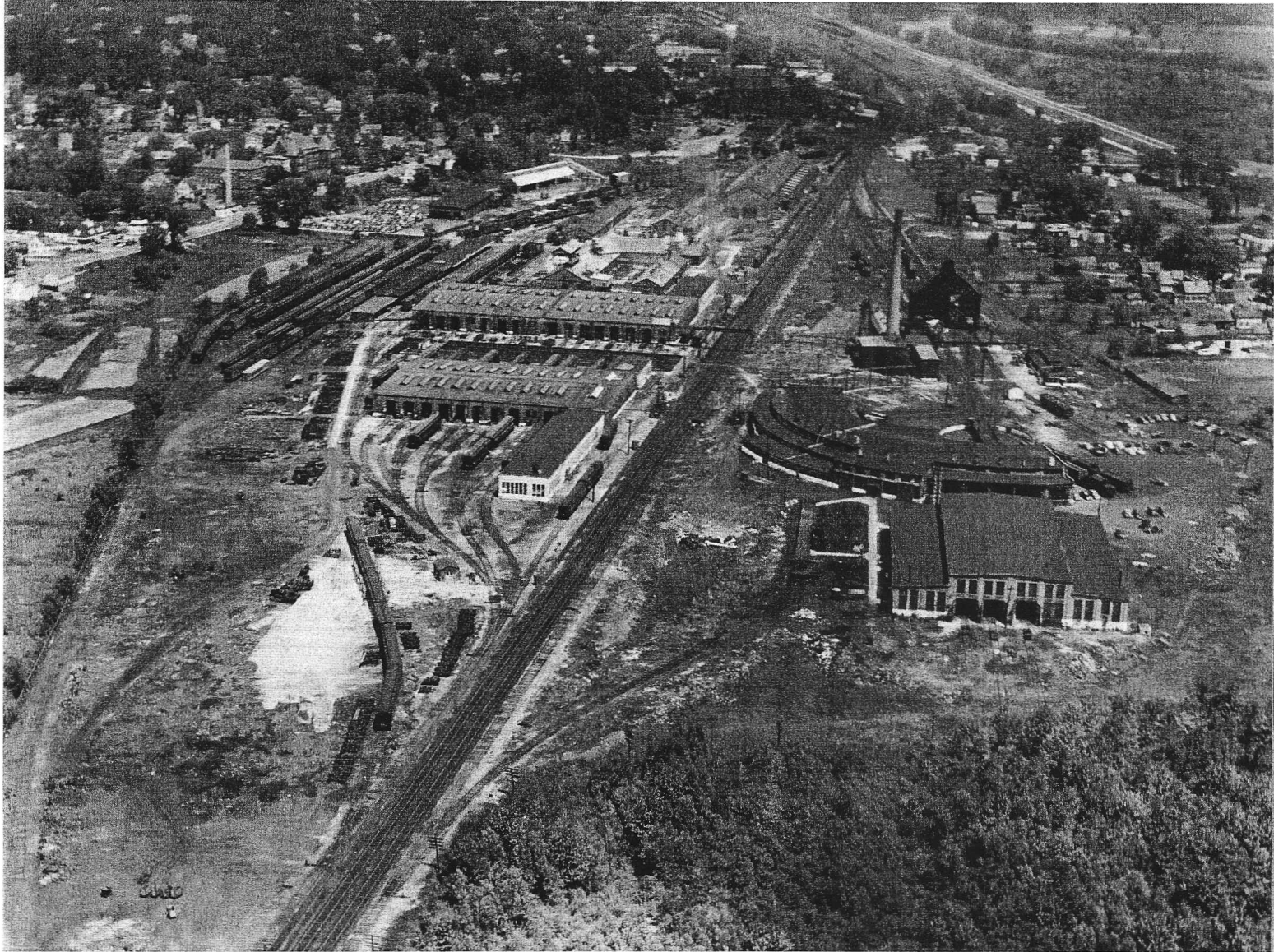
BACKGROUND INFORMATION

Between 1840 and 1860, Concord had more than doubled in population, from just under 5,000 people to almost 11,000. Much of this growth was attributed to the trade brought by the railroads, the first of which arrived in Concord during 1842 (the Concord Railroad). The continued growth of the city was fueled by the rapid industrialization and increase in commerce, which were largely the result of the arrival of the railroads. By 1900, Concord's population had almost reached 20,000. The B&M Railroad was the town's largest employer, thanks largely to the Car Shops.

ACQUISITION AND CONSOLIDATION

Local railroads had developed a well-traveled network in the Concord area by the 1850's and 1860's. The city was served by one railroad from the south, the Concord Railroad, which brought in a sizeable, dependable stream of rail traffic from that direction, and shipped considerable traffic southward. Not surprisingly, Concord was the headquarters of the Concord Railroad Corporation. Three other railroads connected Concord to the north and west: Concord & Claremont; Northern (of New Hampshire); and Boston, Concord & Montreal. These railroads had been completed into Concord by the early 1850's.

These railroads had all fallen into the possession of the Boston & Maine Railroad by the 1890's. The flurry of acquisitions, mergers, legislative wrangling, and political intrigue culminated in 1895 when the Concord & Montreal (itself formed from the merger of the Concord and the Boston, Concord & Montreal railroads in 1889) was leased to the Boston & Maine. This was the final major battle of the New Hampshire railroad wars of the last part of the Nineteenth Century.



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Seen from the air, the shop facilities in Concord, N.H. were still in full use around 1950. Neither the car nor engine shops would survive the decade, however, and a major employer would gradually disappear from New Hampshire's capital city altogether.

EARLIER FACILITIES

Each of the predecessor railroads had its own shops and engine facilities in Concord. The rapid acquisition of these several railroads serving Concord left the ever-growing Boston & Maine with a number of older, redundant facilities for servicing the equipment used on its northern New England routes. The older facilities were clustered in the area now bounded by Interstate I-93, Storrs Street, and the Capital Shopping Center in downtown Concord. The great amount of rail traffic at that time supported the need for a modern shop facility; Concord's central location as a junction point was a logical choice.

In order to upgrade and consolidate these older repair and servicing facilities, and to free up land for expanded yard areas, the Boston & Maine constructed a new car and locomotive shop complex during 1897. The Concord Car Shops complex originally consisted of facilities for light and heavy repairs and regular maintenance of the railroad's motive power, as well as the maintenance-of-way, passenger, and freight equipment. The Shops were designed to satisfy the repair needs of several Boston & Maine operating units of

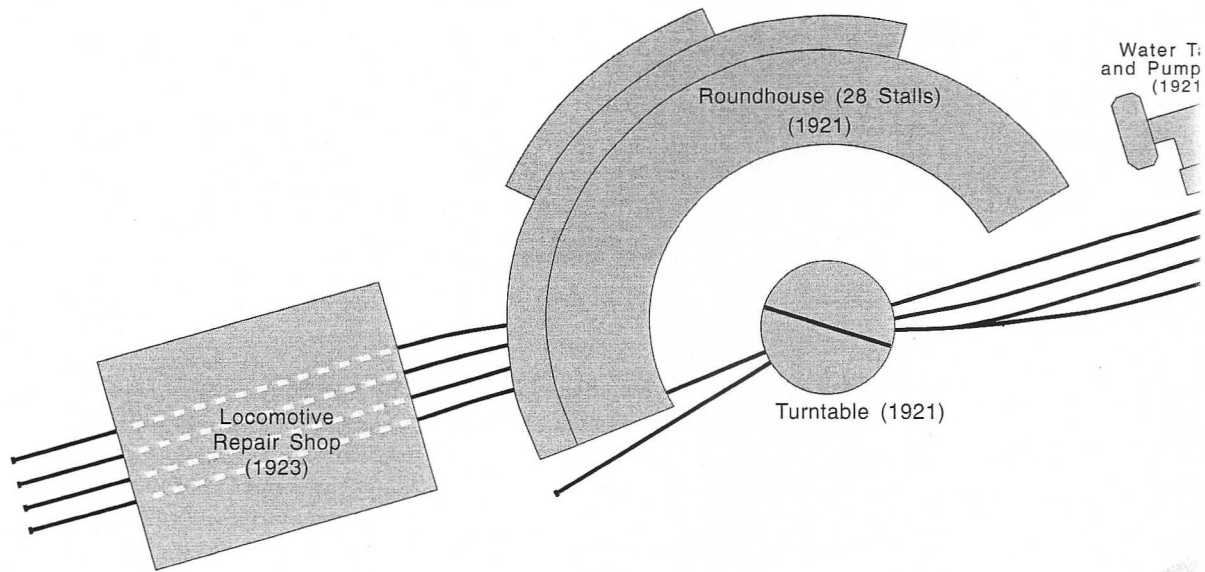
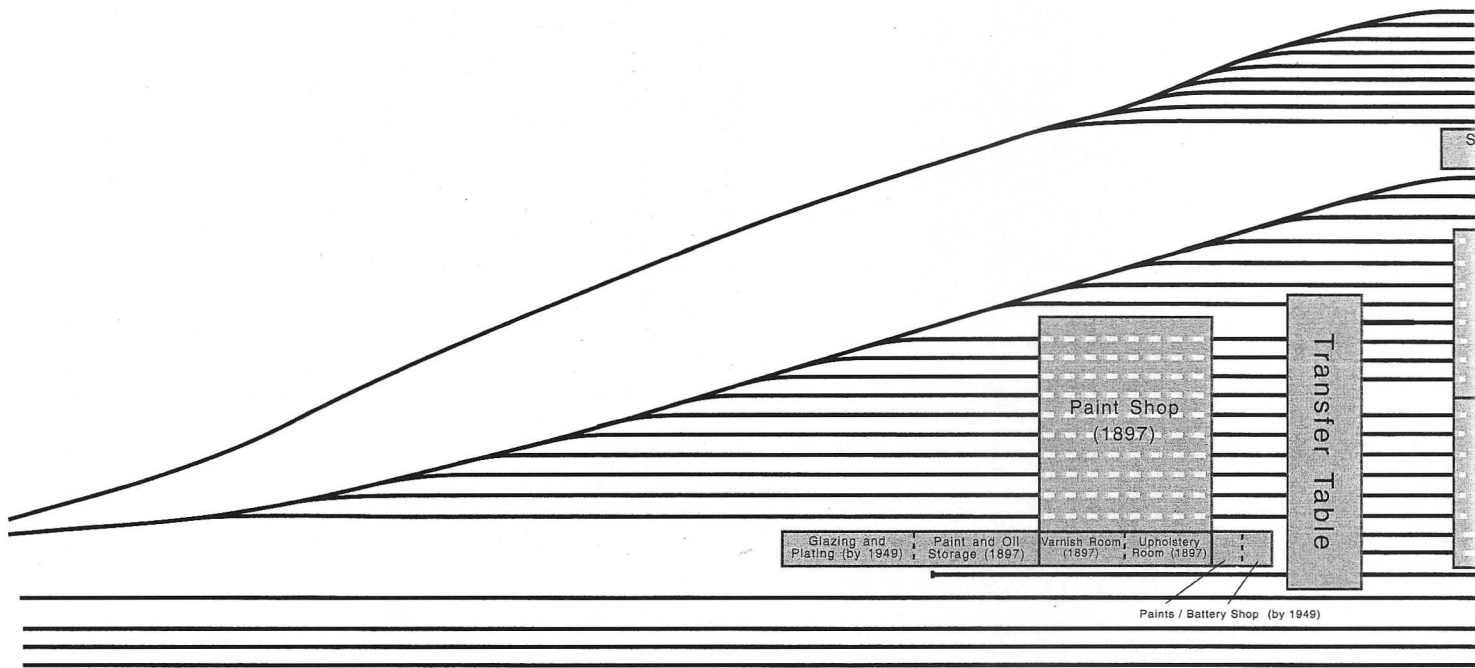
that time: the Concord; White Mountains; Worcester, Nashua & Portland; and Southern Divisions. The Concord Shops were second in size and importance only to the shops facilities at Billerica, Massachusetts.

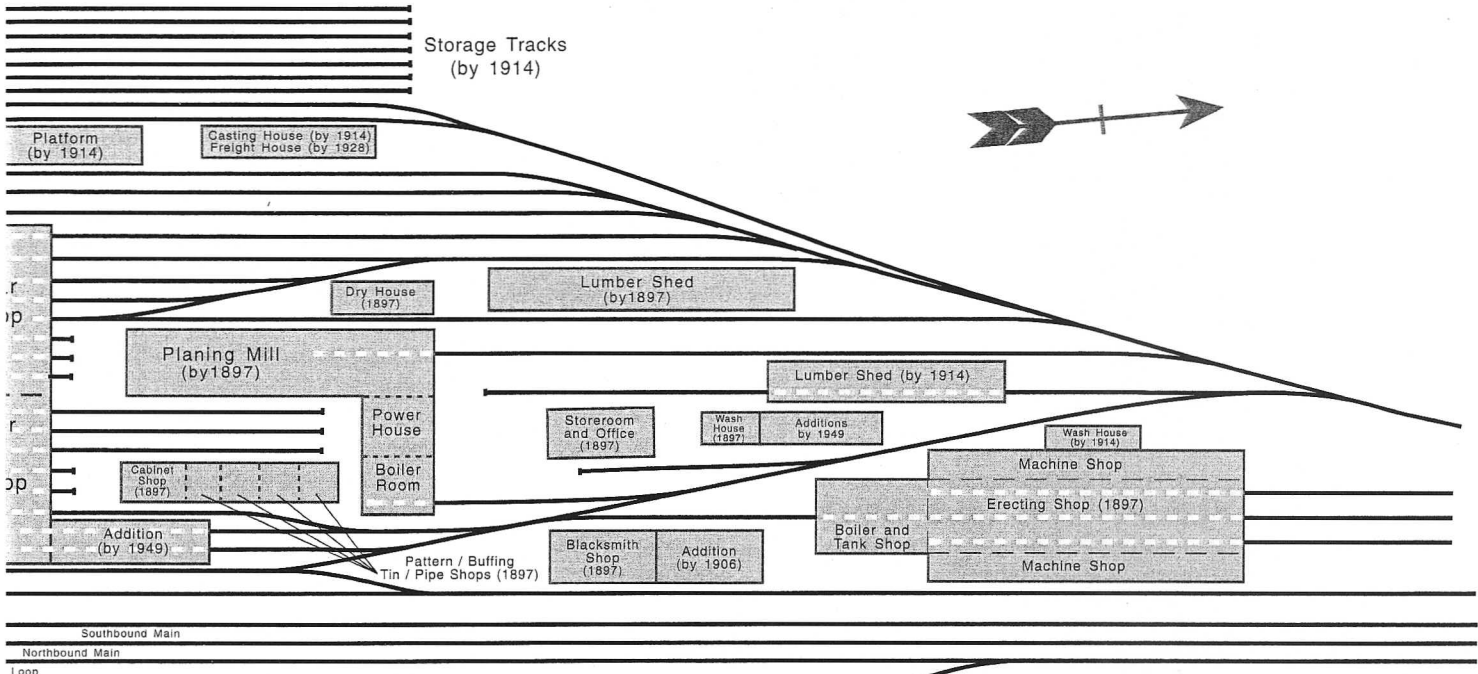
The Shops Complex was situated on a level parcel of land, 26 acres in size, about a mile south of Concord Station, midway between the station and Bow Junction. The Shops were located off Langdon Road in a mixed neighborhood of industrial, commercial, and residential properties. The car barns of the Concord Street Railway were located immediately west of the Complex. The New Hampshire mainline ran alongside the eastern side of the Complex. At the time of the Shops' construction and operation, the mainline consisted of three through tracks: the northbound and southbound mains, and the Suncook Loop.

CONCORD SHOPS COMPLEX

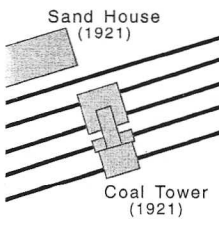
The Concord Car Shops were used for a period of about 60 years. The Shops were operated during a time when railroads operated great numbers of revenue equipment (compared to

(Continued on page 12)





Approx. 250'



all Street

Concord Car Shops and Engine Terminal

Concord, New Hampshire

Developed from a Sketch by Kenneth Milender

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today); equipment was commonly designed and constructed by the railroad's own shop crews.

The Shops Complex consisted of "state-of-the-art" (for 1897!) facilities for all the operations necessary for the repairing, servicing, and painting of the railroad's equipment. In addition, many of the parts and materials used in light repairs at far-flung points on the system were fabricated, prepared, and distributed from the Concord Shops. The Shops served as a storehouse for the northern New England operating divisions.

When opened for use in 1897, the Shops complex consisted of six main shop buildings and a number of smaller storage and ancillary buildings, occupying over 4.5 acres of land. As shown on the track plan, each shop building was divided into the individual shops and rooms based upon the operations conducted inside. Buildings for storage and other uses would be added or moved over the years, but the main shop buildings and the overall shop configuration, as well as the operations undertaken, remained fairly consistent over time. Much of the remaining land was used for storage tracks. The Shops complex was constructed with a dense network of track to allow easy access to all of the buildings.

As originally constructed, the Shops complex was divided into the Motive Power and Car Departments. The Motive Power Department was located at the north end of the property. The Car Department, for both freight and passenger equipment, was at the south end. Facilities shared by the two departments (such as the Blacksmith Shop) were in the buildings located between the two departments.

MOTIVE POWER DEPARTMENT

The Motive Power Department was devoted to repairing and servicing the railroad's motive power. This Department was located in the three buildings in the northern portion of the original Shops Complex. The Erecting, Machine, and Boiler Shops occupied the northernmost building. The Blacksmith Shop was housed in a separate building south of the Boiler Shop. The third building, the Wash House, was also in a separate building (just west of the Boiler Shop).

The Locomotive Shop building was divided into four sections: two Machine Shops in the east and west wings of the building; Erecting Shop in the building center; and Boiler and Tank Shop at the south end.

Each of the three work tracks had longitudinal work pits below the tracks for most of their lengths inside the building. The pits were supplied with water, air, and steam. The two side tracks could each accommodate seven locomotives (14 total for general repairs).

Locomotives would be brought into the Erecting Shop on the center track for disassembly. Two 30-ton cranes would then transfer the subassemblies to the two side tracks and the Machine and Boiler Shops for work. After the repairs and overhauls were completed, the engine would be reassembled back in the Erecting Shop. The two Machine Shops contained all the tools and machinery necessary for repairs and fabrication of locomotive parts. The Machine Shops were laid out for ease of access and order of operation:

northeast: woodworking (planers, shapers, and milling machines).

southeast: wheel and axle works.

southwest: tool room, air brakes, and brass working.

northwest: engine works (engine lathes; drilling, boring, milling machines).

The machinery in the two machine shops was powered by shafts turned by two electric motors (a 20-hp motor in the west wing shop and a 30-hp motor in the east wing shop). Electricity for these two motors was provided from the Power House.

CAR DEPARTMENT

The Car Department was used for repairing, servicing, and re-conditioning the railroad's revenue (and non-revenue) equipment. This Department was located in the southern portion of the original Shops Complex. The Car Department consisted of the Coach and Freight Car Shop, Planing Mill, Power House, and Paint Shop.

The Coach and Freight Car Shop had a firewall that separated the building in half, the west half for freight cars and the east half for coaches. Each half had eight tracks that ran through the width of the building. These interior tracks could accommodate 32 freight cars and 16 passenger cars for repairs and overhauls.

The Planing Mill contained all the woodworking equipment for milling raw lumber into the finished lumber needed in the passenger and freight car repair shops.

The Powerhouse and Boiler House contained all the engines, dynamos, boilers, and air compressors to power, heat, and light the entire Shops complex.

The Painting Shop had 10 interior tracks with space and equipment for up to 16 passenger cars and four locomotives inside.

There were also a number of smaller shops and rooms dedicated to individual auxiliary functions (such as the air brake room, cabinet shop, and sheet metal room). Other heavy manufacturing services, such as metalworking and casting for large parts, was likely purchased from local (or from Boston-based) enterprises; Concord was a small, but thriving, industrial town, with a number of foundries, carriage manufacturers, and their suppliers.

A transfer table, located between the Paint Shop and the Coach and Freight Car Shop, was used for moving cars from repair to painting. The 1936 photograph shown in *B&M Bulletin* (Volume XXI, No. 1, page 17) shows the area well, although the facilities are mostly submerged below floodwaters!

NEW LOCOMOTIVE SHOPS

The most dramatic change to the Shops Complex occurred in the early 1920's. Locomotive servicing facilities (roundhouse, turntable, coal shed, sand house, water tanks, and pumphouse) were constructed on the east side of the mainline, opposite the Car Shops, during 1921. New facilities for locomotive repairs were opened immediately south of the new roundhouse during 1923. The new locomotive repair shop apparently allowed the Motive Power Department to vacate the 1897 building. The freight car shops were then transferred to the former locomotive shop at the north end of the Complex. The passenger equipment shops were then expanded to fill the second half of the original 1897 car shops building. This arrangement may have continued until the Shops closed.

THE END

The need for multiple heavy repair facilities diminished as passenger and freight traffic dropped off during the 1930's, 1940's, and 1950's. Declining traffic allowed the Boston & Maine to concentrate repair operations in the shops at Billerica and to close shop facilities at outlying points of the Boston & Maine system. Northern New England was no longer an important traffic generator and Concord diminished in importance as a junction point.

An additional factor in Concord Shops' decline was the revenue equipment in use was increasingly being made of steel. The greater strength, longer life span, and lower maintenance needs of steel cars allowed the railroad to gradually phase out the older wooden cars, and ended the need for extensive lumber supplies and woodworking shops. The Shops were instrumental in preparing, painting, and maintaining these new passenger and freight cars through the 1950's. A continued decline in car-repair needs first closed the passenger-car shops, then the freight shops. The Concord Car Shops complex was closed for good by July 1958. The repair work that did remain was transferred to the Billerica Shops. The land and buildings were sold during the summer of 1959 to a real estate developer who planned to sell or lease the properties to industries. The railroad hailed their decision to sell the Shops complex as an important way to cut operating costs, raise revenue, and turn unused property into industrial uses that would benefit the railroad by bringing in additional rail customers.

POSTSCRIPT

Ownership of the buildings and grounds has passed through several hands since the Complex was closed. Most of the Shops buildings survive to this day as the Concord Industrial Park ("B&M Realty" remains on a faded sign at the entrance off of South Main Street). Of the major facilities, the Coach and Freight Car Shop building was destroyed by fire in 1988 (see page 19) and the Blacksmith Shop is long gone.

The transfer table has long since been filled. The remaining buildings are generally dilapidated and collapsing.

Leased building space in the industrial park has been occupied by a variety of small businesses. Until recently, none of the occupants has been a railroad customer. The original Motive Power Department has undergone some redevelopment since the 1960's. Housing Edgecomb Steel for many years, the building played host to railcar repair work when a subcontractor leased the facility in the mid-'90's to refurbish a series of MBTA commuter coaches. Around 1997, a local lumber and hardware store (Steenbeke and Sons) refurbished the 1897 Motive Power Department building into a new store, warehouse, and distribution center. Happily, this company, too, is a rail customer. At the same time, Nancy Carlisle Interior Plantings occupied the former storehouse.

The former Car Department, however, has fallen into a state of disrepair. In 2002, only a wood-products manufacturer (Woodpro, Inc.) occupied the former paint shops. This business has been housed in the building for many years. The rest of the available building space is vacant and in a poor state of repair.

The 1920's locomotive roundhouse is gone, but the turntable survives, inoperable and its pit filled with scrap metal, which also covers much of the area now. The power plant outlasted the roundhouse, but the tall, brick smokestack came down in the middle-'80's due to liability concerns. The 1923 locomotive repair shop building is occupied by a metals recycler (Advanced Recycling). A local company (New England Pole Transporters) uses a large area near the tracks for unloading and storage of telephone poles. These two businesses are frequent rail customers.

A recent proposal was unveiled for construction of a regional retail center on the location of the former Car Department. Local residents of Concord's South End neighborhoods vigorously opposed the proposal, and the City Planning Board recently rejected this proposal, based on the environmental, traffic, and historical concerns of local residents. •

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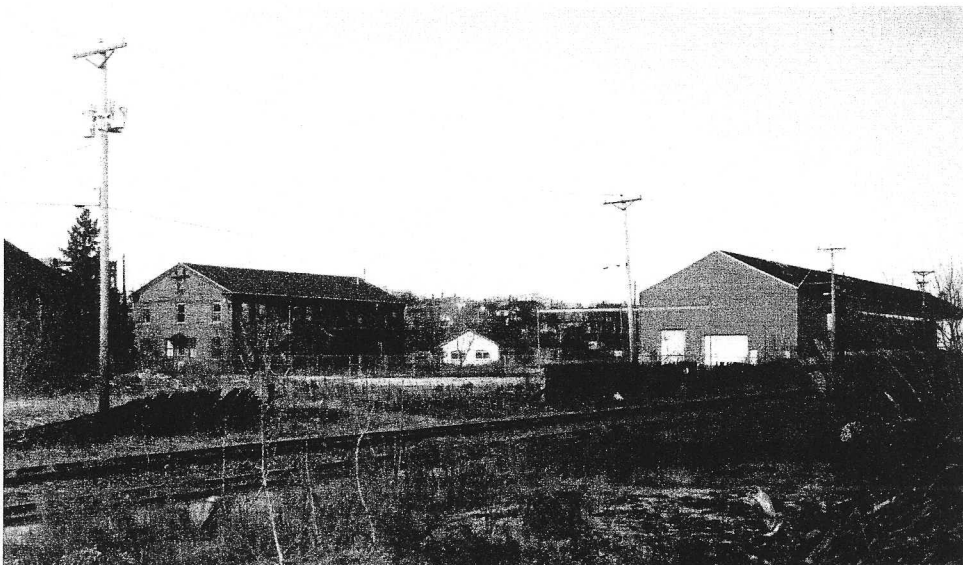
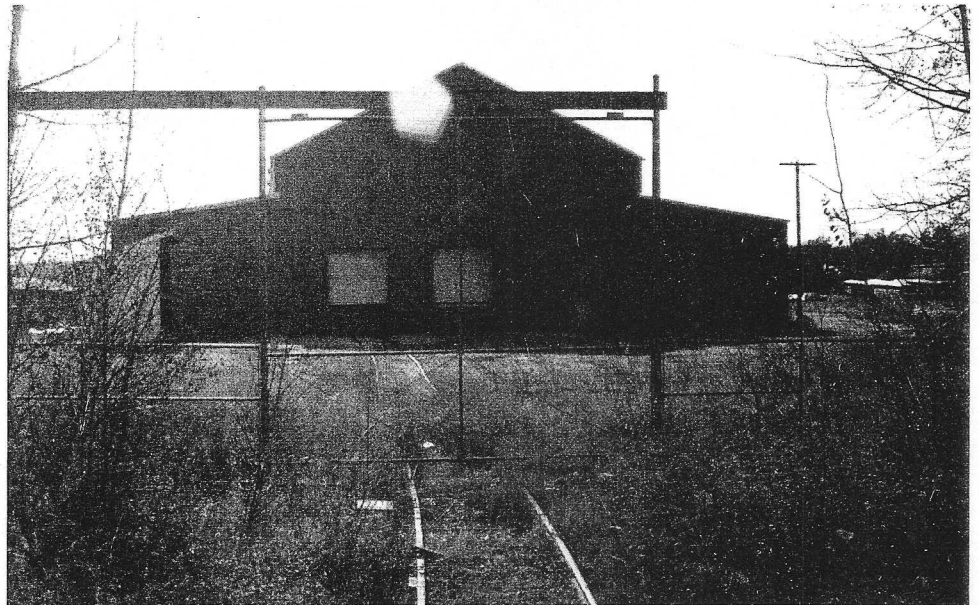


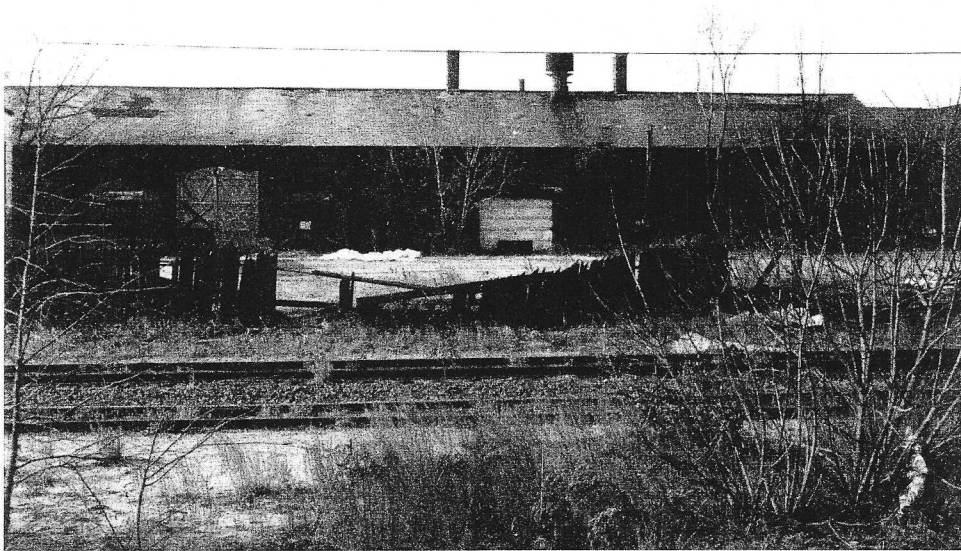
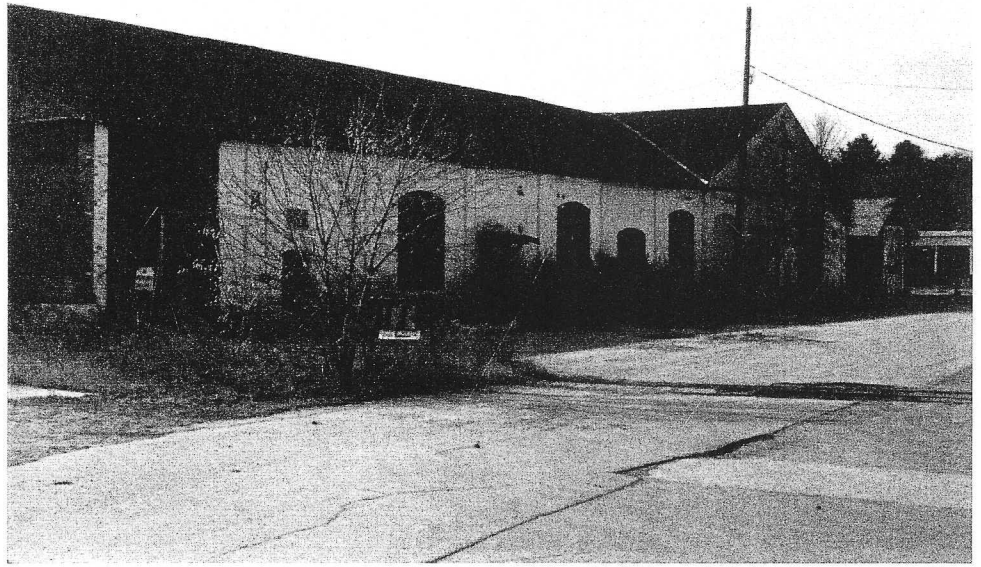
Both pages, Kenneth W. Milender

The 1923 engine repair shop, above, photographed by the author in 1993. Some of the property is used for storage of telephone poles; a metal recycler who operates the rest of the property has inundated the area with scrap lately.

The north end of the original (1897) locomotive repair shop, right, was vacant at the time of the photograph (1993). A home-improvement/lumber retailer now occupies this building, though it was briefly employed for railcar repair after many years of use by Edgecomb Steel.

The remaining section of the wash house and south end of the original locomotive repair shop is pictured below. Tracks once ran through the middle section of the shop and through the center door. Photograph taken in 1993 from the approximate location of the original blacksmith shop (which was razed some time between 1936 and 1949).



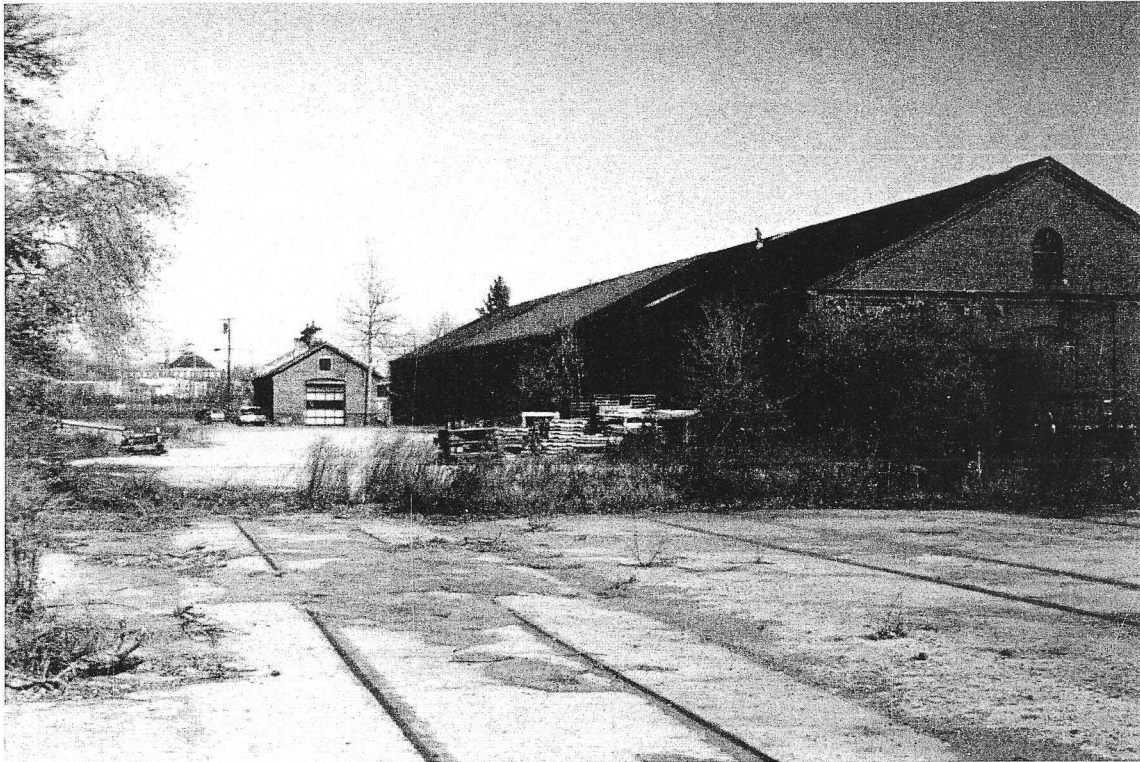


North end of the boiler room, top, the powerhouse, and planing mill seen in 1993.

Side view, left, of the former cabinet shop and other small fabricating and finishing shops (1993).

Planing mill (left) and cabinet shop (right) flank the former power house in 1993 in the bottom photo. All of these buildings are in serious decay, but development may catch up to them before dilapidation.





Both photos, Kenneth W. Miender

This view, above, looks north from the floor of the former car repair shop (destroyed by fire in early 1988). From the right are the former planing mill and dry house. In the distance is Concord's picturesque gasholder, no longer in use, but preserved by the gas company. The north end of the original paint shop is shown below. The oldest part of the structure is the brick building with the skylights. The metal-sided addition was added in the early 1930's.

