Appendix E

Cultural Resource Evaluation Reports

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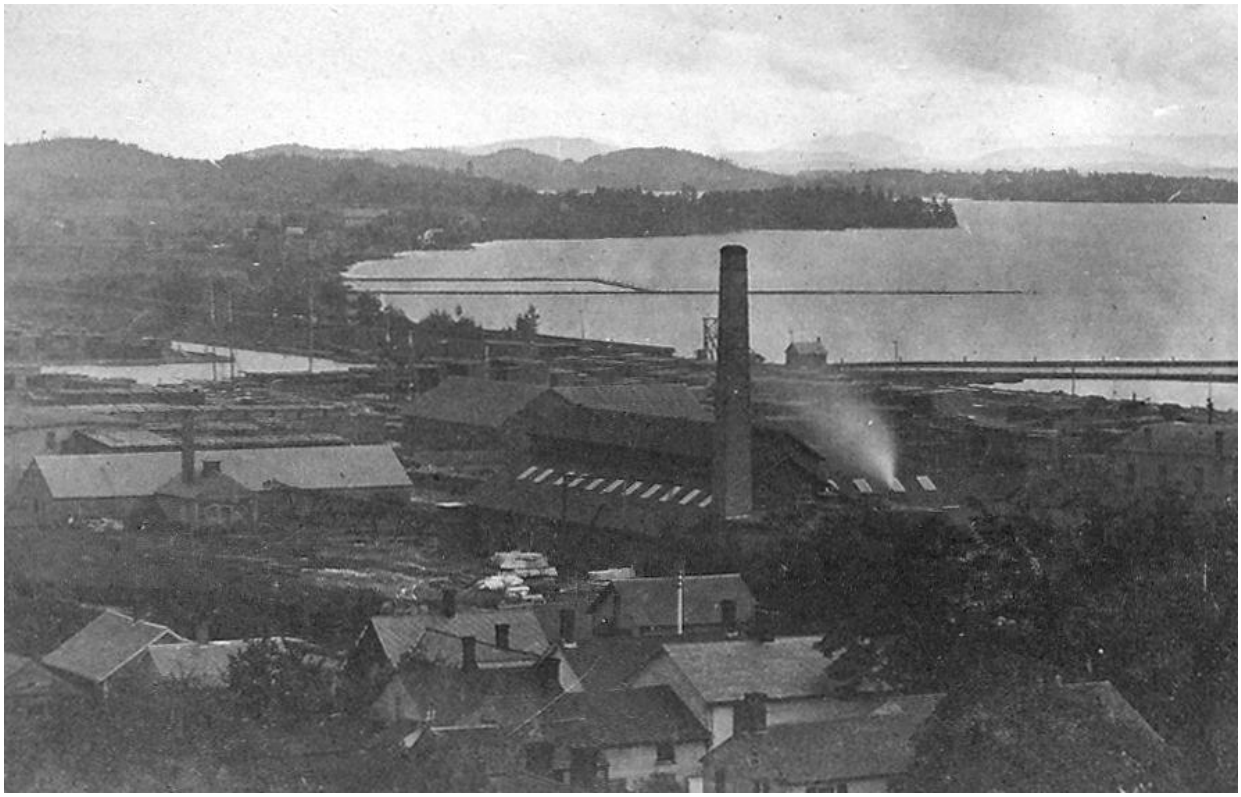
HISTORIC RESOURCES REVIEW FOR THE BURLINGTON RAILYARD ENTERPRISE PROJECT SCOPING STUDY, BURLINGTON, CHITTENDEN COUNTY, VERMONT



Stereoview ca. 1870s looking southwest over the Burlington Railyard Enterprise Project study area.

Submitted by:
Kate Kenny
Catherine A. Quinn
Consulting Archaeology Program
University of Vermont
111 Delehanty Hall
180 Colchester Avenue
Burlington, VT 05405
October 2013

Report No. 725

HISTORIC RESOURCES REVIEW FOR THE BURLINGTON RAILYARD ENTERPRISE PROJECT SCOPING STUDY, BURLINGTON, CHITTENDEN COUNTY, VERMONT

Prepared for:
Resource Systems Group, Inc.
55 Railroad Row
White River Junction, VT 05001

Submitted by:
Kate Kenny
Catherine A. Quinn
Consulting Archaeology Program
University of Vermont
111 Delehanty Hall
180 Colchester Avenue
Burlington, VT 05405
October 2013

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INTRODUCTION

This historic resources Scoping Study review of the proposed Burlington Railyard Enterprise Project, located in Burlington, Chittenden County, Vermont, was conducted by 36 CFR 800 qualified Historic Preservation Specialist, Catherine A. Quinn and Historian Kate Kenny of the UVM Consulting Archaeology Program, in order to assist Resource Systems Group, Inc. (RSG) and the City of Burlington with compliance under Section 106 of the National Historic Preservation Act of 1966 and its amendments. The proposed project was reviewed according to standards set forth in 36 CFR Part 800, the regulations established by the Advisory Council on Historic Preservation to implement Section 106. Review consists of identifying and evaluating historic resources on or eligible for listing on the National Register of Historic Places that have the potential to be affected by project work. Research for this report included a search of Burlington Land Records, historic photograph and postcard collections, historic reference files, county and town histories, historic maps, historic newspapers, the National Register of Historic Places Nomination forms, and the State of Vermont Division for Historic Preservation (VDHP) Historic Sites & Structures Survey. A site visit and visual inspection of the project area was conducted on June 5, 2013, with several subsequent visits throughout the summer and fall of 2013. All current photographs were taken during these 2013 sites visits.

PROJECT DESCRIPTION

The purpose of the Burlington Railyard Enterprise Project is: 1) to develop a network of multimodal transportation infrastructure improvements, which incorporate the principles of Complete Streets, to support economic development in the area; 2) improve livability of the surrounding neighborhoods; 3) enhance multimodal travel connectivity between the Pine Street corridor and the Burlington Waterfront South area; 4) and improve intermodal connections to the Burlington Railyard (Chittenden County RPC 2013). The project builds on the Waterfront South Access (WFS) Project, completed in June of 2010 (RSG 2010). The key focus of the WFS Project was to develop alternatives for access and circulation to and within the study area with the central goal of promoting economic development. Alternatives developed to support this goal included an improved truck access to the Vermont Railway Railyard through Pine Street, and a grid-street network to facilitate connectivity and local travel, and foster development in the area. To meet these objectives, the WFS Project developed a total of seven alternative street networks, combined with six street cross-sectional treatments. The study recommended three access / circulation alternatives each of which, when combined with complementary municipal and private infrastructure, could contribute significantly to the economic development of the study area in the future. The Railyard Enterprise Project alternatives will further emphasize the economic development opportunities in the study area and support railyard operation enhancements.

The Railyard Enterprise Project study area is located along the eastern shore of Lake Champlain in Burlington, Vermont; it is bounded by the lake on the west, King Street to the north, Pine Street to the east, and its southern boundary runs just south and west of Marble Avenue, along the northern end of a man-made water way known as “the Basin” (Figure 1). This area contains numerous residential and commercial properties, along with the City of Burlington’s Wastewater Treatment Plant, Vermont Railway’s railyard and headquarters, Perkin’s Pier, and a portion of the Island Line Trail / Burlington Bike Path.

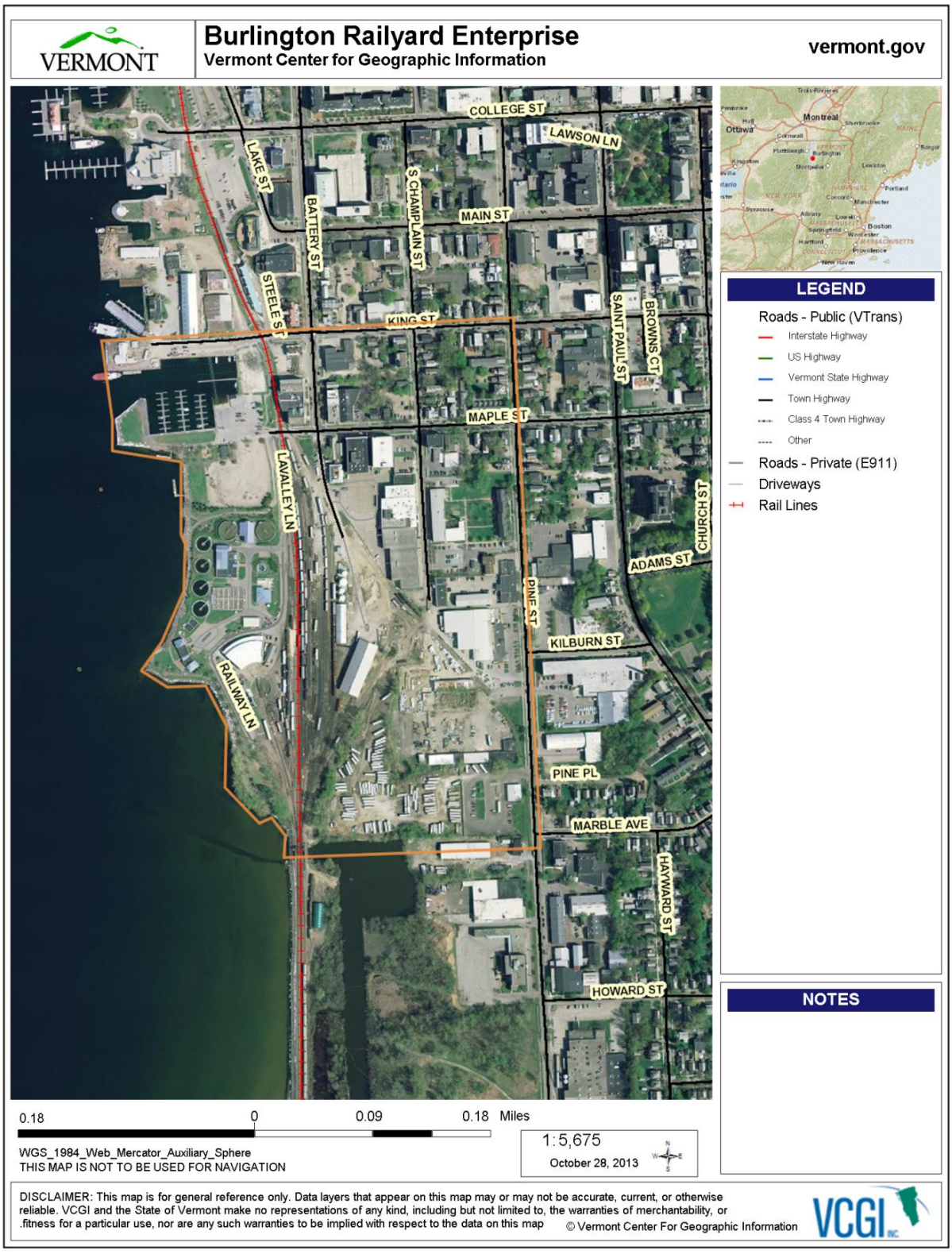

Figure 1. Map showing the location of the Burlington Railyard Enterprise Project area, Burlington, Vermont (Source:VCGI).

PROJECT AREA HISTORY

When Euro-American settlers arrived in Burlington, they found a large sandy crescent beach lying at the foot of a bluff along the eastern margin of Lake Champlain. The bluff ranged from about 30.5 m (100 ft) high at the site of present day Battery Park to a low gentle slope at lake level just north of a large swamp known as the 'cove' near the foot of present day Maple Street (Rann 1886:404). This latter point, which lies in the current project area, was the site of some of the earliest settlement in Burlington, it being a key point of access to the lake. By 1790, it was reported that there were three dwellings in this general area. Of these, one was located in the current project area. It was located at the southeast corner of Battery and King streets and had been built ca. 1780 by Job Boynton (ship owner of the *President, Leopard*, and *Burlington Packet*, and a fur trader). The other nearby structures included the house of John Collins built ca. 1783 on east side Battery Street near the 'Pomeroy House' and the ca. 1788 Gideon King (Sr.) home and tavern at the northeast corner of King and Battery streets (*Burlington Free Press* June 25, 1858; *Burlington Free Press* February 11, 1876; Hemenway 1867:668). Also, reportedly, near these houses, stood a single room store kept by a 'Scotchman or Englishman' named Grant and a blacksmith shop located a "little north of the Collins place on opposite side of street" (Rann 1886:397-398).

The portion of the project area near the lake shore at the foot of Maple Street was first known as the "south landing" (e.g. *Vermont Centinel* November 11, 1802). In 1800, Richard Fittock (ca. 1746-1810), formerly a ship's carpenter for Benedict Arnold's fleet, settled with wife, Peggy, and their daughters, Avis and Nelly, at the southwest corner Maple and Battery streets where he "built a dwelling house and a store house" (Force 1848:209; Rowell 1873:216-217; *Vermont Centinel* November 11, 1802; *Vermont Centinel* August 17, 1810). Fittock's primary business was unloading vessels with the aid of a large scow called 'the Old Lion' (Hemenway 1867:669; Rowell 1873:216). Since the bay was so shallow, vessels "anchored out some rods from the beach to discharge their cargoes. Pork, beef, liquors were thrown overboard and floated ashore, while dry goods and such articles were landed by the Old Lion" (Hemenway 1867:669). Reportedly, Fittock, like Gideon King Sr., "also kept a kind of tavern" and it was said that "in order to be popular with both loyalists and rebels, or, those who in the war had been favorable to either, he had an oval sign, about 3 feet by 2 feet, swinging over his door, with Lord Nelson painted upon one side and George Washington upon the other" (Hemenway 1867:669).

In November of 1802, the 'Burlington Bay Wharf Company' (which included several of the early leading residents of Burlington such as Zacheus Peaslee, Thaddeus Tuttle, Samuel Hickok, Moses Catlin, and Ebenezer T. Englesby) obtained the exclusive privilege to build a dock in Burlington Bay from the state (Rowell 1873:229). However, it appears that not much actual construction was done as the license had to be re-issued in February of 1804 (Tolman 1808:436). After this, it appears that some kind of rough wharf was built (*Vermont Centinel* May 13, 1807), although, it may have been the one later described as "a few logs fastened to the shore of the lake" (Rann 1886:397-398). Never-the-less, with the help of this landing a "successful trade soon sprung up" between Burlington and Montreal and Quebec; with great rafts of local timber/lumber, barrels of potash / pearl ash, and wheat being sent north in exchange for "fish, salt, iron, tobacco & etc" (Child 1882:141; Hemenway 1867:668; Rann 1886:398). Due to the early reliance on lake transportation, Burlington's merchants soon found themselves to be important middlemen in trade. Burlington "naturally became the principal receiving and

distributing point for the commerce of Northern and Northeastern Vermont" (Rann 1886:477). "From the earliest history of the mercantile business of Burlington . . ., it had been the custom of most of the merchants throughout the country, and even as far east as Montpelier, to order their goods of Burlington merchants" (Rann 1886:425).

One of the earliest stores within the project area may have been that of William Hickok, who reportedly "opened a store in a small wooden structure which stood on the bank, a little north of the present stone store of Van Sicklin, Seymour & Co." prior to 1797 (Child 1882:140). Many of the early stores in the project area were small structures and they often served as both a residence and a shop.

In addition to merchants, the south landing also attracted some early ship building to the project area. For example, "in the Spring of 1793 the keels of the *Dolphin* and *Burlington Packet* were laid under a large oak tree, which stood upon the shore immediately in the rear of the stores now occupied by Isaac Nye and Morillo Noyes at the foot of King Street" (Hemenway 1867:669). In 1795, two more ships were built at the same place (Hemenway 1867:669). In 1797, "the sloop *Maria*, of about 30 tons burden, was built by [Gideon] King where the stone store stands, now. The master builder was Richard Fittock" (Hemenway 1867:669). In 1808, John and James Winans built the steamboat *Vermont* nearby and began making regular commercial trips the following year.

At this time, the southern part of current project area (south of Maple Street) was dominated by 'the cove,' a large natural wetland (Figure 2). When the area was first settled, "the woods reached down to the water's edge all along the shore from Red Rocks to Rock Point. From Peterson's brewery [on Champlain Street] to the stone store were trees, and the water in the cove came up to them so that vessels could enter the cove and tie up to the trees, the beach where the depot stands forming a breakwater for them" (Hemenway 1867:669). The cove remained largely unaltered for many years (although it was used by some as a dumping ground for trash). As late as the 1820s, it was noted that: "the meadows on the Onion River and also the cove along the southern portion of the bay abound with game, and most of the inhabitants are expert sportsmen" although, admittedly, hunters were far more likely to bag gray squirrel than deer (*Vermont Centinel* September 23, 1825). The filling of the cove and the lake's margin was at first minor and localized (Figure 3). For example, in 1800, the low water mark near the Fittock house, was said to be "at a point ten rods [165 ft] distant from, and west of, the west line of Water [Battery] Street" (Rowell 1873:222). Fittock, it is said, had a fenced in orchard and garden on the lake side of his property "having filled in some part of [Water Lot] No. 9 for that purpose, which was, before, low and swampy" (Rowell 1873:216).

In August of 1810, Curtis Holgate purchased the long planned wharf site at the foot of Maple Street along with the "timber and stone thereon intended for the building of a wharf" (BLR 3:527). In November of 1810, the Vermont legislature awarded Holgate the exclusive right to operate a wharf at Burlington for twenty years and he built a wharf (Figure 4; see Figure 2) (Hemenway 1869:604; Tolman 1817:287). Orange Buell (1792-1878) was "among those who went from Essex [Vermont] to assist in raising the first store that was built on the old wharf" he later recalled that "Bill Bliss, of Essex, framed the building, which required two days and a large quantity of the best kind of rum to raise" (*Argus and Patriot* February 6, 1878). A few years later, Holgate established a ferry service between Burlington and Chesterfield, New York

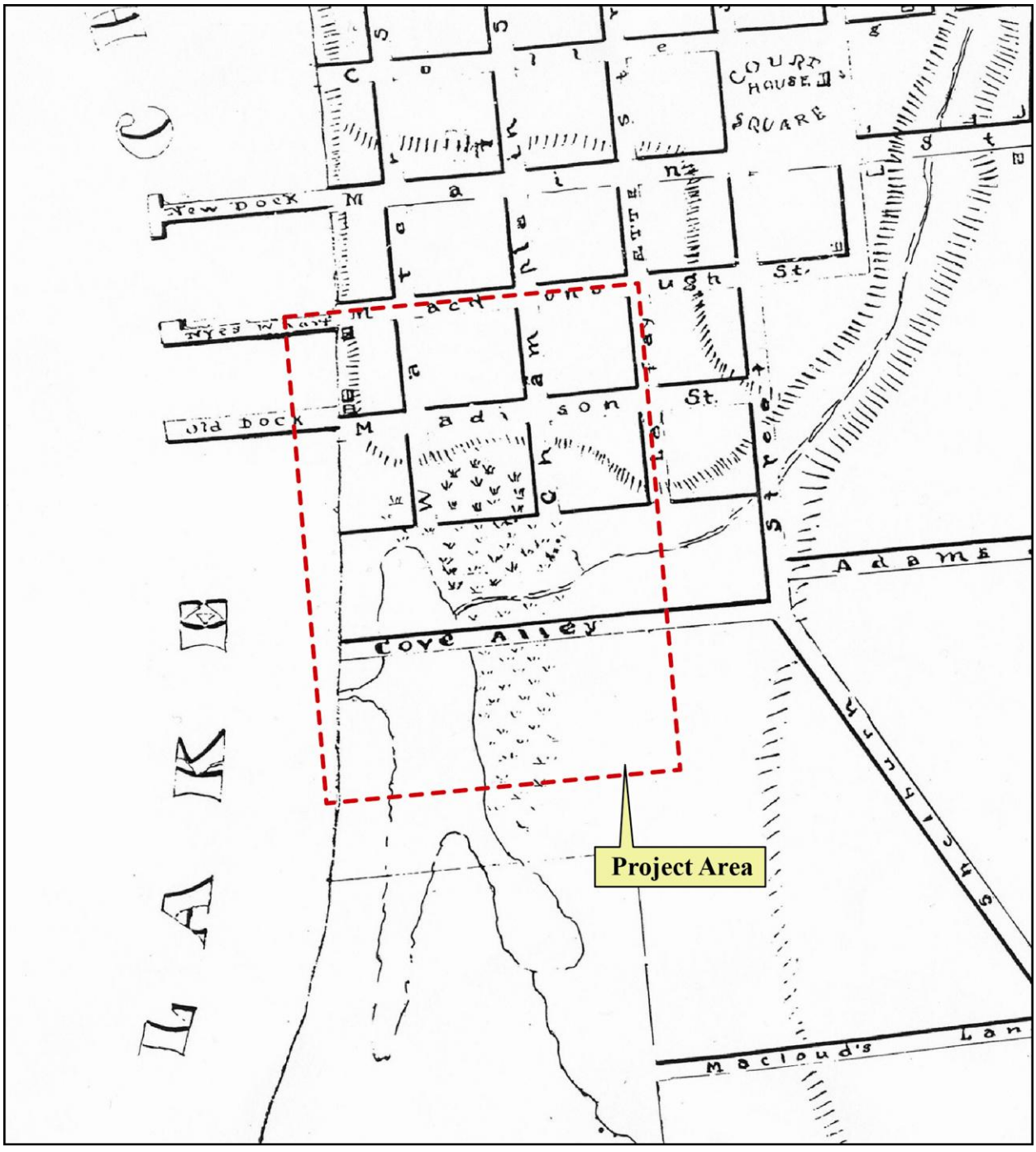

Figure 2. Detail from *Map of Burlington*, with the Burlington Railyard Enterprise Project study area indicated. *Madison St.* is present day Maple Street.

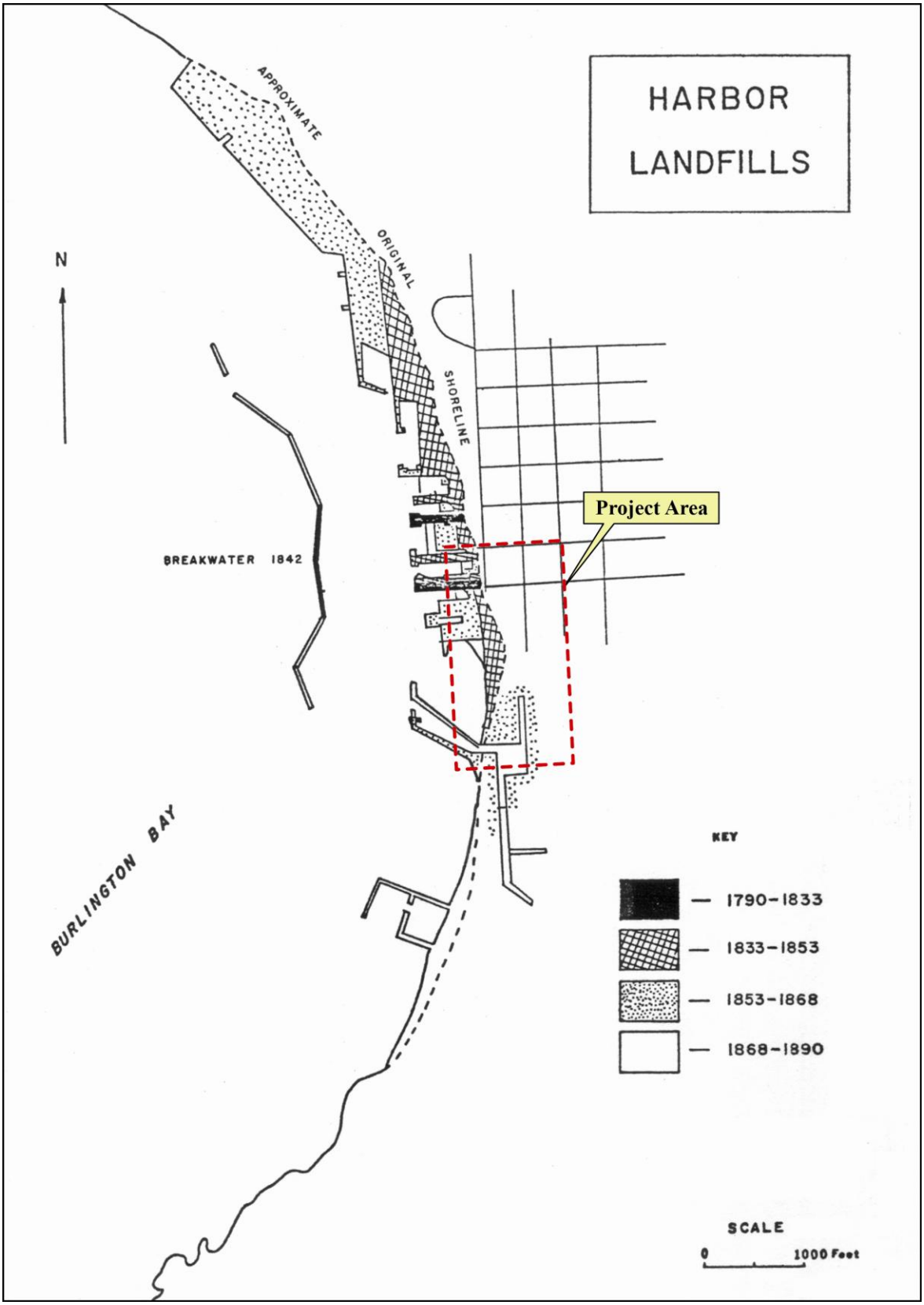

Figure 3. Sketch map showing periods of infilling within Burlington harbor, with the Burlington Railyard Enterprise Project study area indicated.

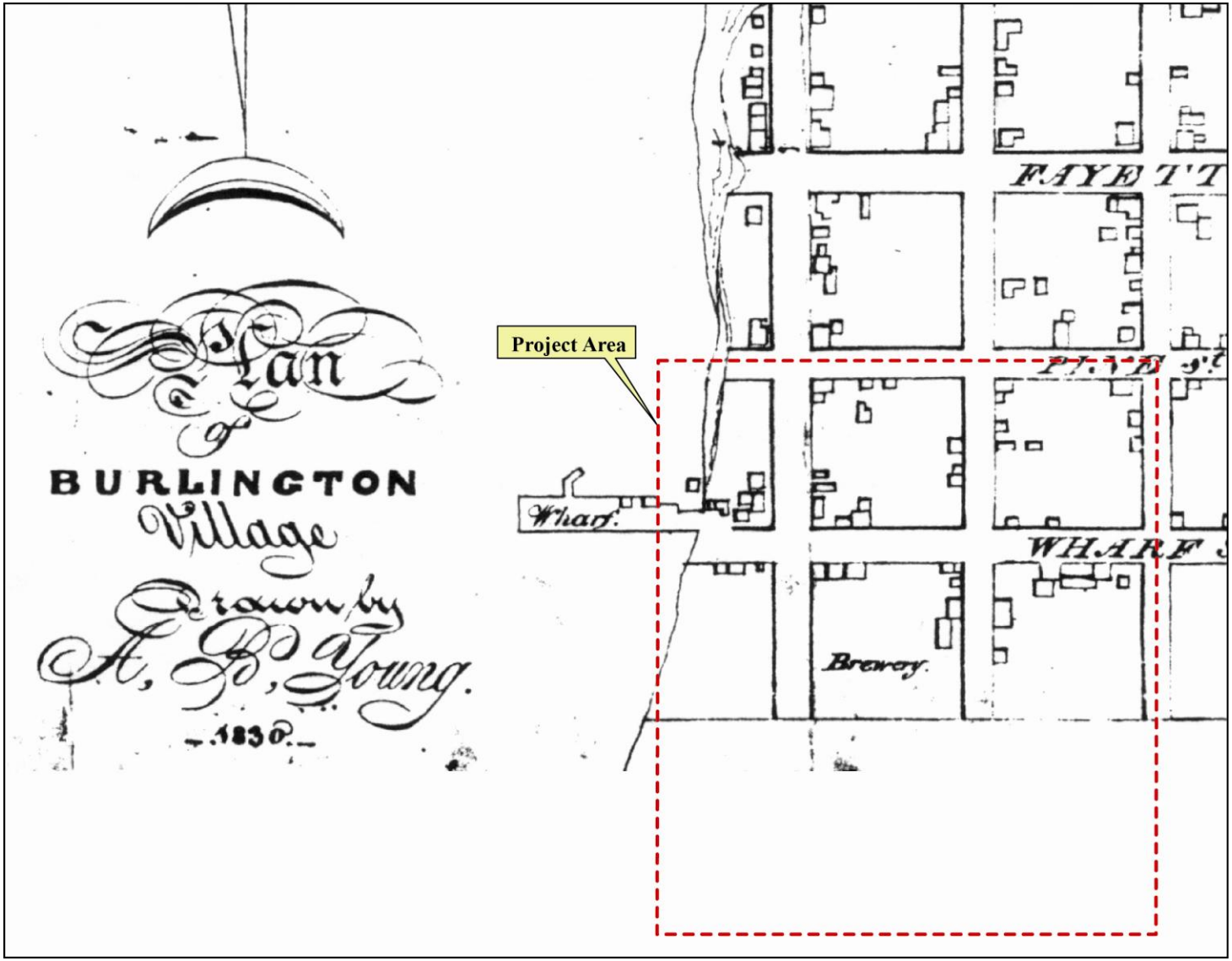

Figure 4. Detail from Ammi B. Young's 1830 *Plan of Burlington Village*, with the Burlington Railyard Enterprise Project study area indicated. *Wharf St*. is present day Maple Street.

(*Vermont Centinel*, May 24, 1816). In ca. 1824, Zadock Thompson noted that Burlington had "an extensive wharf . . . constructed for the convenience of loading and unloading merchandize &c upon which several store houses have been erected" (Thompson 1824:85). Holgate sold the wharf along with the water lots, dwelling house, barn, and a woodhouse to Henry Mayo in 1818 (BLR 5:653; *Vermont Centinel* July 18, 1817). Over time, this wharf went by many names including South Wharf, Salt Wharf, First Wharf, Madison Wharf, Mayo's Wharf, and Follett & Bradley's Wharf.

The opening of the Champlain Canal between Lake Champlain and the Hudson River Valley in 1823 changed the focus of Burlington's trade away from Montreal and Quebec and towards the south to New York; greatly expanding trade (Thompson 1824:85). As one 19th century historian noted: "as the state became more settled and population increased, the business, especially in flour, iron, grain, butter, cheese, and heavy goods, [and weighty specialty items including bottles of 'Congress Water' and oysters in the shell] assumed more of a wholesale character, and to avoid the expense as well as inconvenience of cartage, it drifted towards the lake, and additional docks and wharves were built to accommodate it" (Rann 1886:478). Within the study area, larger stores and storehouses began to replace the earlier shops and storage shanties. For example, the first section (south half) of the 'Stone Store' was built just up from the wharf, in 1827, with the north half added ca. 1841; the Stone Store still stands today (#209 Battery Street; Battery Street Historic District No. 1). Also from this period, is the Greek Revival style 'Musicant Building,' on the lower east side of Battery Street that was built ca. 1848. The Musicant Building also remains standing today (#196 Battery Street; Battery Street Historic District No. 9).

As the town's population grew and as its business expanded between 1800 and the 1830s, substantial residential settlement occurred within the project area. In fact, the area was fairly well settled by the time Ammi Young's map of the village was produced in 1830 (see Figure 4). Many of these early residences occupied larger parcels in order to accommodate the dwelling house, barns, sheds, wood houses, orchards, gardens, small fields/pasture, hog stys, outbuildings and, possibly, features such as wells, cisterns, and privies. Nineteenth-century historians noted, that in the early 1800s the area near the head of the wharf harbored "a number of the most respectable families in town" (Rann 1886:419). Many of these families were associated with shipping and/or mercantile pursuits: including Gideon King (ship owner); Robert and Andrew White (ship masters); Gideon Lathrop (either Sr., a tanner, or Jr., a ship's captain – steamers *Whitehall* and *Congress*); Henry Mayo Sr., and Nathaniel Mayo (merchants / bakers); Henry Mayo Jr. (ship's captain / merchant); Henry Smith (house builder); William P. Phillips (ship's captain; steamer *Macdonough*); Elias and/or Isaac Nye (merchants); Daniel Davis (grocery / shipping); Truman Powell (doctor and drug store owner); Zenas Flagg (1791-1823 in business with Daniel Fuller); the Fittock family; Capt. Winans (ship owner); Curtis Holgate (wharf and ferry owner); a rental property belonging to John N. Pomeroy; and a blacksmith shop belonging to Ebenezer and/or John Allen (B*urlington Free Press* February 22, 1889; BLR 3:392; BLR 9:279; John Johnson; Rann 1886:406; St. *Albans Messenger* April 28, 1871; U.S. Census 1820). Today, there are few architectural survivors from this period within the study area. Those that do remain include the "Capt. White House" located at #43-45 King Street (Battery Street Historic District No. 31), which was built by Robert White and his brother, Andrew White, ca. 1815 and was occupied by them to ca. 1822; and a brick structure once owned by Gideon King Jr. (built ca. 1830) at #35 King Street (Battery Street Historic District No. 80).

As one of the primary gateways into town, more inns and taverns were built on the lower portion of Battery Street within the project area during the first half of the 19th century. One of the earlier taverns not already mentioned was located on the east side of lower Battery Street; it was established prior to the War of 1812 and was run by various individuals including at least Jonathan Hart and Russell Harrington (John Johnson; Rann 1886:404). One of the most important hotels in this area was located a short distance north of the Stone Store and was known variously as Harts Hotel (Figure 5; run by Moses L. Hart 1807-1884), which was once referred to as the 'Waldorf Astoria of Burlington'; as the Exchange Hotel; and, after ca. 1858, as the Lake House (Beers 1869; Horton 1912:24; Presdee and Edwards 1853; Walling 1857). Unfortunately, this structure along with a store of Van Sicklin & Walker (to the north) and all buildings going towards the lake burned in a fatal fire on November 8, 1869 (*Burlington Free Press* July 9, 1858; *Burlington Free Press* November 9, 1869). Yet another tavern/inn kept in the project area was located at the southeast corner of Battery and Maple streets and was owned by John Soragan (or Saragan) (1808-1874) a native of Ireland who moved to Burlington and bought "the house long occupied by him" at the southeast corner of Water and King streets in 1839 (Beers 1869; *Burlington Free Press* July 24, 1874; Wainwright 1862). Finally, the Noyes block, built pre-1849, had the 'Alhambra Saloon' in it (*Burlington Free Press* December 24, 1849).

One early industry established in the project area was a brewery on the west side of lower Champlain Street (now the site of the former Champlain Valley Fruit Company building (#241-243 South Champlain Street; Pine Street Historic District No. 10). Samuel Hickok built the brewery in 1828 (*Burlington Free Press* March 7, 1828; Young 1830). Although once destroyed by an arsonist, it was rebuilt and was operated by a succession of individuals: including E. Hickok, Robert N. Flack, George Peterson, and Ammi F. Stone (who produced 3,000 barrels of beer here in 1871), to at least ca. 1885 before the complex was converted into tenements (Beers 1869; Child 1882:113; John Johnson; Rann 1886:461; Sanborn Mapping and Publishing Company 1885 and 1889). Another early industry that settled in the project area was John K. Gray's / Charles B. Gray carriage factory. John Gray started his business ca. 1831 on Pearl Street, but moved to the project area ca. 1848; his complex in the project area included a carriage shop, blacksmith shop, and lumber storage structures. The large brick carriage shop, which still stands (#183 South Champlain Street; Battery Street Historic District No. 19), was converted into apartments in 1885 (*Burlington Free Press* January 9, 1885; Sanborn Mapping and Publishing Company 1882 and 1889; Lothrop).

The prosperity of the lower waterfront area of Burlington continued with the completion of the Richelieu Canal, which connected Lake Champlain to the St. Lawrence River (1843), the construction of two more wharfs north of the first wharf before 1842 (including the 'Nye wharf' at the foot of King Street built ca. 1836; Horton 1912:5) and the beginning of the construction of the breakwater in Burlington's bay, which greatly improved the town's notoriously poor open harbor (1842). The structure at #194 South Champlain Street is a district school built ca. 1850 (Battery Street Historic District No. 27), which reflects the population growth in this area leading up until this time. This building was sold to Horace Smith in 1874 and has been used as a private residence since. The Merchants Bank Building that still stands at #202 Battery Street within the study area was constructed in 1850 (Battery Street Historic District No. 7).

In February of 1846, it was reported that the "directors of the Rutland Rail Road have fixed on the location of the terminus of the road at Burlington. It is on the south side of South

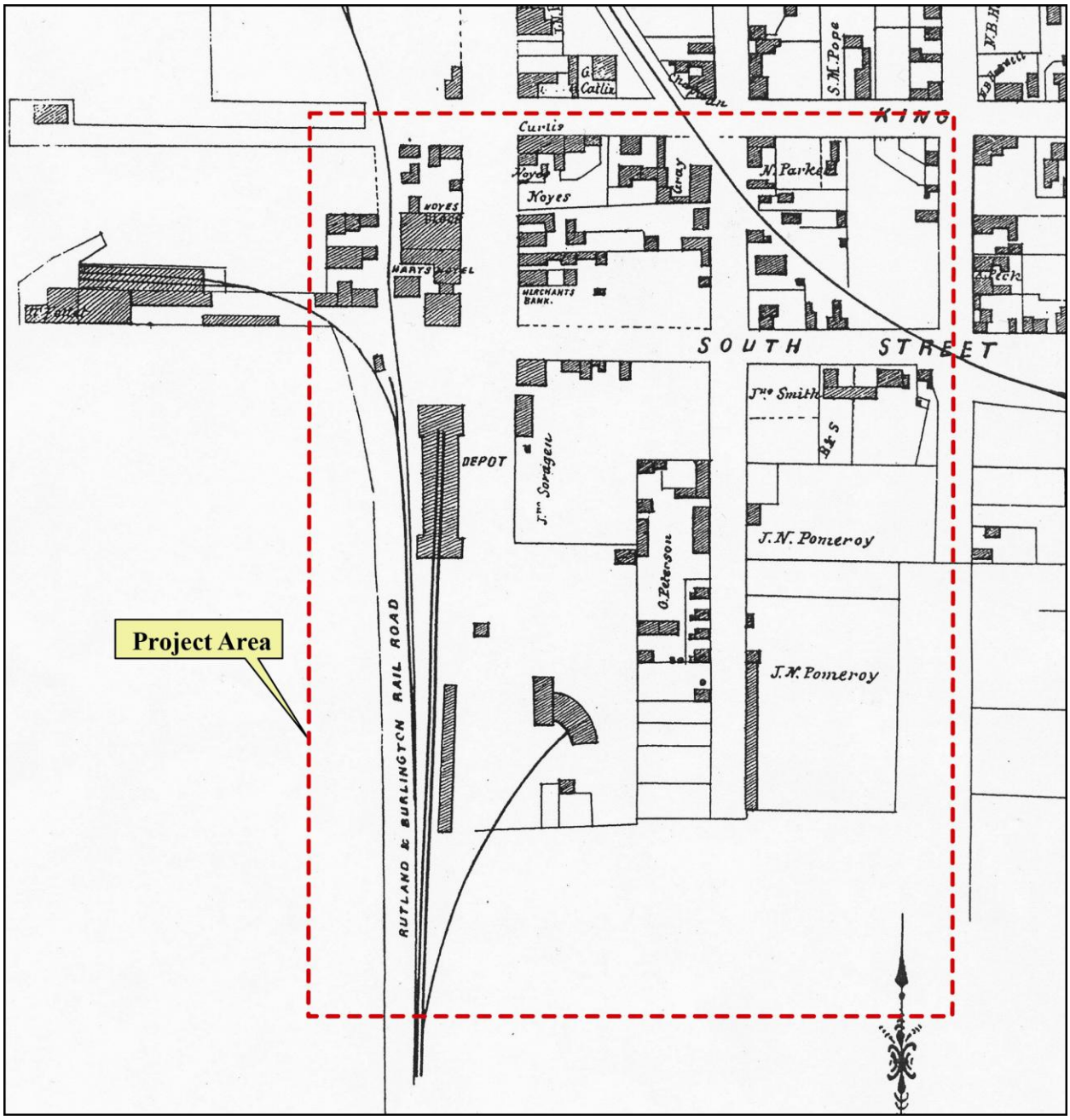

Figure 5. Detail from Presdee and Edwards' 1853 *Map of Burlington, Vermont*, with the Burlington Railyard Enterprise Project study area indicated. *South Street* is present day Maple Street.

Street at its intersection with Water Street—has lake front sufficient for all the purposes of the road—covers about 15 acres of land, and affords a most advantageous and admirable termination in all respects" (*St. Albans Messenger* February 4, 1846). In 1847, the railroad secured the land it needed for the depot grounds within the project area from John N. Pomeroy (*Burlington Free Press* June 11, 1847). By October 1847, it was reported that: "the work of filling up the Cove opposite the South end of Water [Battery] Street, for the Depot Grounds and Buildings of the Rutland Road, is progressing with vigor and success. The road embankment at the south side of the Cove is also under rapid advancement" (*The Northern Galaxy* October 5, 1847) (see Figure 3). On March 2, 1849, the *Burlington Free Press* reported that "several unsightly buildings lying south of Hart's Hotel in Burlington are in the process of removal to make room for the erection of a splendid and commodious Railway Depot for the Burlington and Rutland Railroad Company" (*Burlington Free Press* March 2, 1849). It is possible that these structures formerly belonged to the Fittock family, as one later historian noted: Fittock, "kept a shanty for storing goods near where the Rutland & Burlington depot now stands" (Hemenway 1867:669). For the design of the "depots in Burlington, Rutland, and Bellows Falls, and for depots and station-houses on the line of the road," it was reported that "the Board of Directors have very judiciously secured the services of Ammi B. Young Esq., of Boston, the eminent architect" (*Burlington Free Press* March 2, 1849). The Rutland and Burlington Railroad grounds within the project area included its large passenger depot, engine roundhouse, barns, sheds, freight houses, and a mechanic shop. None of the original railroad structures stand today. The Rutland Railroad began active operations in Burlington in late September of 1849 (*Burlington Free Press* September 20, 1849). According to later Sanborn maps, the old Rutland Railroad station was torn down between 1894 and 1900. Archaeological investigations located the remains of the early roundhouse under layers of fill in the 1990s (Corey and Petersen 1998).

The establishment of the Rutland Railroad in the project area resulted in extensive changes to the landscape. For example, adjacent to the former Fittock property, the Rutland and Burlington Railroad reportedly "filled in with earth, to the west of said ten rods distance, and into the lake, a distance of 110 feet" (Rowell 1873:222). Then, George W. Beckwith had "at large expense under a lease and contract [of the RR] . . . built and extended still further out into the lake" a dock for coal and wood yards (Figure 6; see Figure 3:1853 – 1868) (Beers 1869; Rowell 1873:222; Wainwright 1862; Walling 1857). This dock was later used by Elias Lyman (coal company) and William Loomis (Hopkins 1890). The creation of new land along the lake shore in Burlington was accomplished in a variety of ways, but mainly by cribbing or by the construction of bulkheads. Cribbing involved the construction of a series of large squared timber and/or log chambers held together by iron rods or wooden dowel fasteners, which were built or maneuvered into place and filled with stone or sand (Crock 2001; Horton 1912; Visser et. al. 1990:18). Bulkheads were linear retaining walls, which had perpendicular "dead man" anchors or ties extending into the fill (Crock 2001; Horton 1912; Visser et. al. 1990:18). These were most likely used in wetland areas. However, in some places, "when they wanted to make a new pier they . . . sank a barge and filled it with stone" (Visser et. al. 1990:20). In still other areas, such as in natural low lying areas or small ponds, fill such as sawdust, wood shavings, ashes/cinder, or sand was simply dumped (Crock 2001; Horton 1912).

Central Vermont Railroad (which combined the interests of the Vermont Central Railroad and the Vermont & Canada Railroad) broke ground in Burlington on February 19, 1846, in the north part of town at the "interval bank" (*Burlington Free Press* February 20,

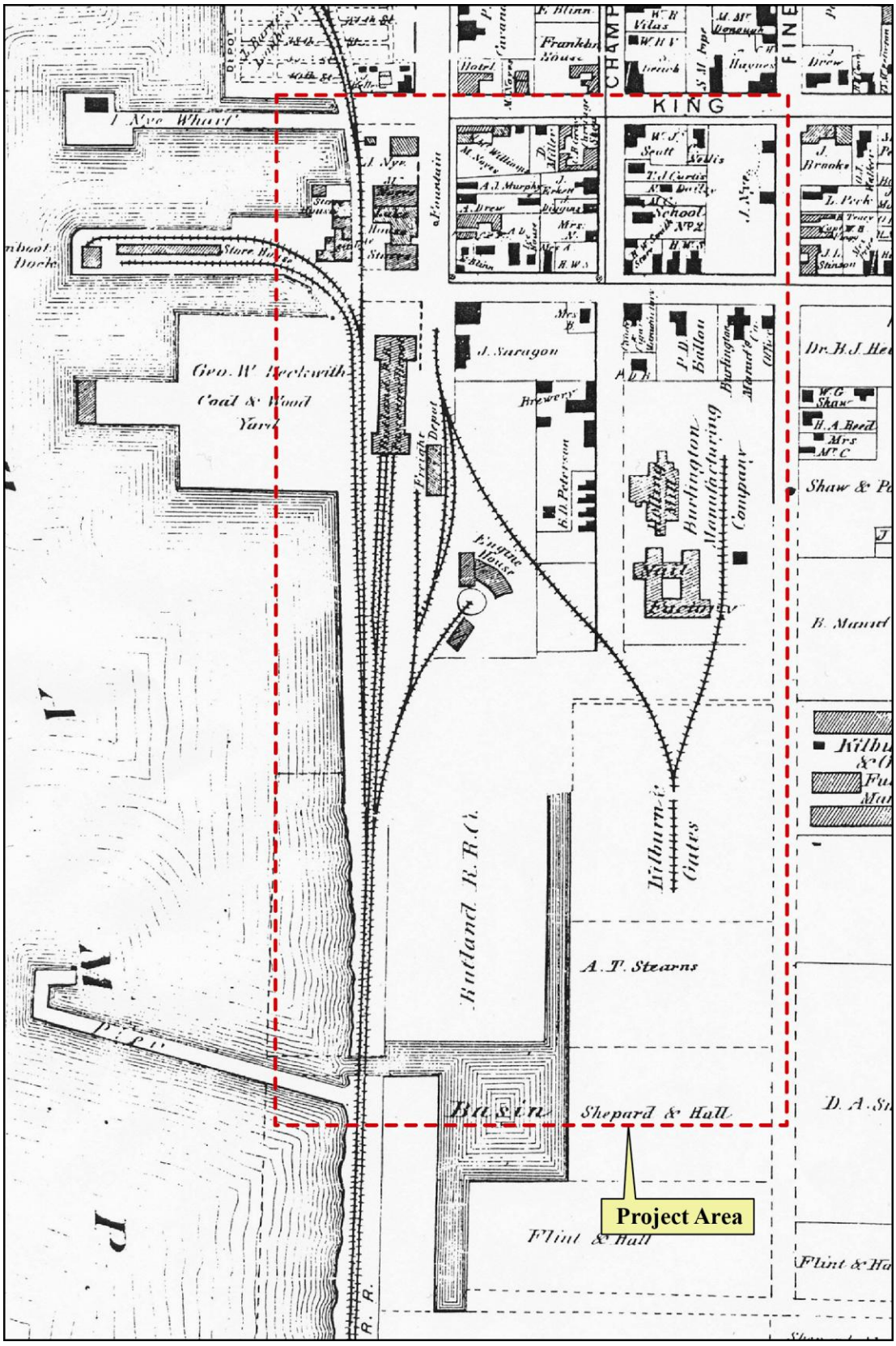

Figure 6. Detail from Beers' 1869 *Atlas of Chittenden County, Vermont,* with the Burlington Railyard Enterprise Project study area indicated.

1846). This railroad had to take on the difficult "ravine route" though Burlington in order to link up with the Rutland Railroad. This route cut across the northeast portion of the current project area and required the company to pay land damages to several property owners within the project area. Overall, this route was hard to build, requiring deep excavations, massive fills (out into the lake for its freight depot north of Blinn's wharf [Main Street] and for its first passenger depot where the downtown firehouse is now located), and a number of bridges to be built in the town (*Burlington Free Press* October 1, 1847; *The Northern Galaxy* October 5, 1847). At first, an observer noted that "in the vicinity of [Burlington] some two or three hundred are at work [mostly Irish and French from Canada], but the road seems to advance but slowly. They are cutting through sand hills in several places to a depth of 80 or 90 feet; and the whole work is done by hand" (*Burlington Free Press* September 4, 1846). By early 1850, the company had employed a pair of stream shovels (which attracted "crowds of admiring and wondering spectators") to try and complete the 'ravine route' (*Burlington Free Press* April 22, 1850). In September of 1850, it was noted that: "the two steam shovels met and exchanged congratulations some days ago in the excavation north of Pearl Street" (*Burlington Free Press* September 17, 1850). At the same time, the paper noted: "through the lower part of the town the grading of the road is pretty much completed and we see nothing to prevent the . . . laying of the track . . . within a few days" (*Burlington Free Press* September 17, 1850). This route through Burlington was used for a little over a decade before being abandoned. Between ca. 1860 and 1862 the company's contractors cut through the sand bank under North Avenue with a 300 ft long horseshoe shaped brick tunnel and ran the main track on built land along the lake shore (*Burlington Free Press* March 2, 1860). The abandonment of the 'ravine route' opened a few residential lots for development within in the current project area.

At first, the arrival of the railroads harmed many of Burlington's merchants, by taking some of their middlemen status away from them (*Burlington Free Press* May 18, 1899). The crisis forced the citizens of Burlington to look in new directions for growth. Fortunately, by this time, the availability of steam power had liberated manufacturing from reliance on streams. Burlington built the steam powered 'Pioneer Works' north of project area on lake shore early in the 1850s as a business incubator. The first cargo of lumber was imported from Canada by L.G. Bigelow in 1850 (Child 1882:108), then Lawrence Barnes ca. 1855-1856 built the first lumber processing facility on the lakeshore (near ECHO); these events combined to transform the economic direction of the city. Barnes' idea to process rough lumber brought by boat to Burlington before sending it on by rail saved him an estimated 12 ½ percent of the freight expenses (*Burlington Free Press* July 18, 1976). In 1857, the local paper observed that

> Mr. Lawrence Barnes made sales of lumber, to the amount of no less than seven million feet during the year 1856 consisting of Pine, Spruce, and Hemlock. In addition to this, Mr. Barnes has a lease of the Steam Mill on the Lake Shore [on the south side of the foot of College Street], in which he planed and dressed during the year 6,500,000 feet of lumber, and 257,000 pieces of clapboards. This mill has a situation probably excelled by no establishment of the kind in New England. On one side vessels unload their burdens of lumber at its very door-and from the other dressed boards can be tossed on to the cars of either the Vt. Central or the Rutland Road affording a saving in the expense of handling, and advantages from the competition of rival lines of travel, which dealers in lumber will readily understand" (*Burlington Free Press* March 3, 1857; Rann 1886:463, 467; Walling 1857).

From these modest beginnings, Burlington's wholesale lumber industry and related lumber processing industries grew quickly. The *Burlington Free Press* noted in 1857 "the lumber trade of this place is now in the process of a strong and healthy growth. New concerns have engaged in it. Our citizens have watched the area occupied by piles of lumber on the lake shore every day. The dressing of lumber by the aid of stream is extensively carried on, and the very uncommon advantages of Burlington, as a center of sale and transshipment for the trade, have been fully demonstrated" (*Burlington Free Press* March 3, 1857). By 1873, Burlington was the third largest lumber port in the United States (*Burlington Free Press* July 18, 1976).

The railyard began expanding the capacity of the harbor by filling in the shoreline, including an area that falls within a portion of the current study area (see Figure 3:1833 – 1853). Primarily to accommodate the booming lumber industry, a boat basin (a cribbed feature 300 ft square and 8 ft deep) (Pine Street Historic District No. 33) and canal system was constructed within the project area south of the Rutland Railroad passenger depot to provide additional docking and lumber piling space (Figure 7; see Figure 6) (*Burlington Free Press* July 24, 1868). Work on this extensive feature started in 1868 (with forty men) and it opened for use in 1869 (Beers 1869; *Vermont Daily Transcript* November 2, 1868). In July of 1868, it was reported that the work about the cove, was "transforming this old worse than useless. . . miasmatic frog pond into a centre of our rapidly increasing lumber interests" (*Burlington Free Press* July 24, 1868). Early in 1869 it was reported that: "the basin and canals are of such an extent that 70 acres can be readily reached by them. Around these canals and this basin, lumber yards, planning mills and other manufacturing works will spring into life immediately" (*Vermont Daily Transcript* February 9, 1869). By the 1870s, the area around the basin was used extensively for lumber storage (Figure 8; see Figure 7) and by 1890 lumber companies were occupying all of the land surrounding the basin (Figure 9).

Although important, lumber was not the only economic activity going on in the project area in the mid-to-late 19th century. For example, Daniel A. Van Namee, purchased part of the former Mayo family property on Maple Street ca. 1856 and established a candy factory nearby (Wainwright 1862; Walling 1857). This factory was later operated by P.D. Ballou (who was also a city mayor) ca. 1865 (Beers 1869) and, beginning in 1870, by the Arbuckle Cigar & Candy Company, which eventually built the existing four story brick structure in 1885 (#75 Maple Street; Battery Street Historic District No. 104) (Burlington Board of Trade 1889:48; *Burlington Free Press* June 16, 1871; *Burlington Free Press* January 8, 1886; *St Albans Daily Messenger* March 4, 1908; Sanborn Mapping and Publishing Company 1885 and 1889). The Arbuckle Company was considered to be the largest manufacturers of confections in New England outside of Massachusetts; the company employed twenty-five and reportedly made over one hundred varieties of candy (Burlington Board of Trade 1889:48; *Burlington Free Press* June 16, 1871).

At this time there was also a return to wholesale grocery, dry goods, hardware paint tobacco, etc. In 1898, one writer commented that Burlington "enjoys an enviable as well as widespread reputation as a centre of jobbing and wholesale trade (*Burlington Free Press* January 4, 1899). A new dimension to this industry came in with the use of ice houses. One area long associated with this business was located near the northeast corner of Battery and Maple streets, where ice houses were established before 1869 (Beers 1869). These facilities were occasionally rebuilt, replaced and/or expanded and they operated well into 20th century; though there was a switch from natural ice harvest to mechanical refrigeration (e.g. the Lake Champlain Ice Company).

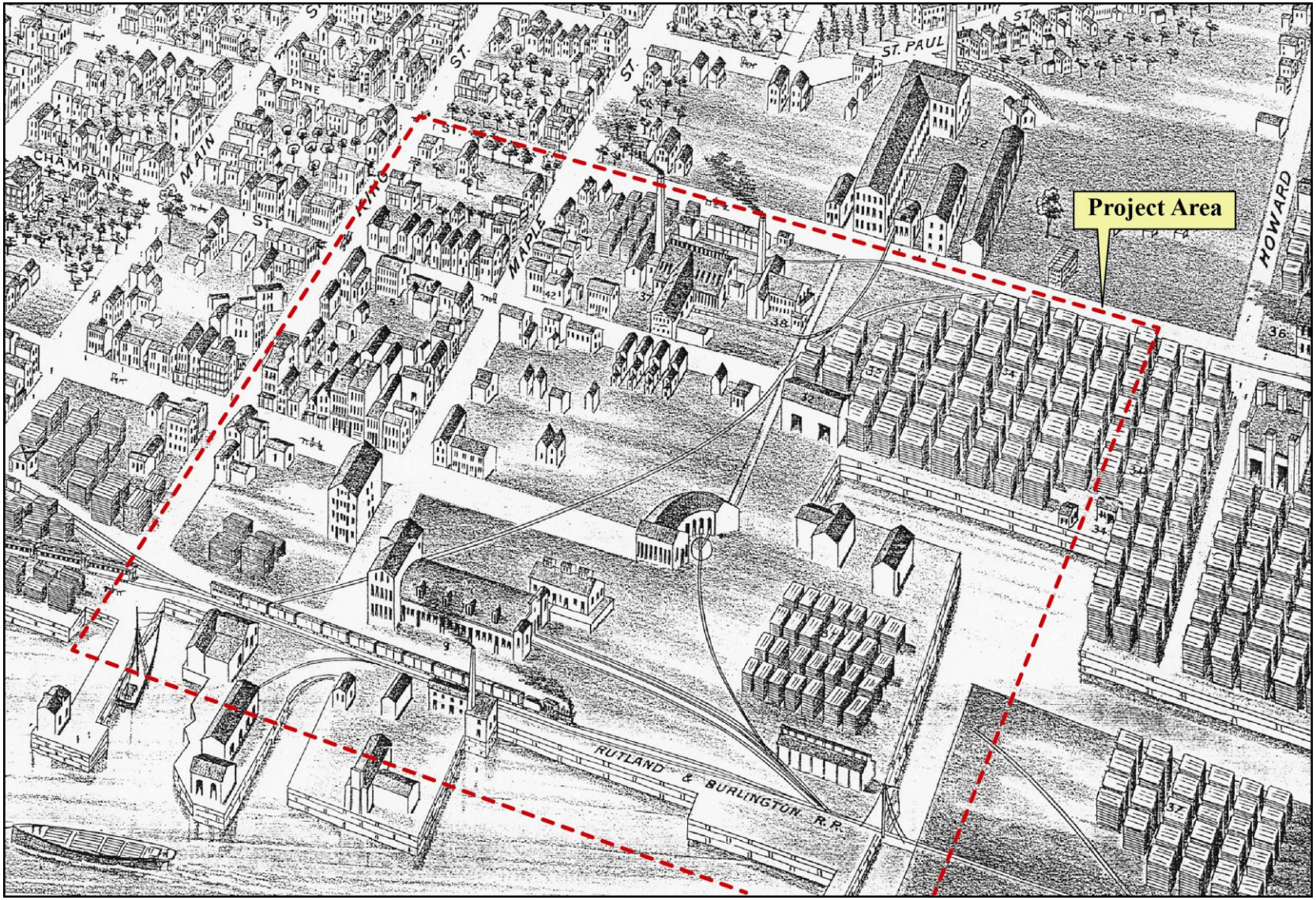

Figure 7. Detail from Meilbek's 1877 *Birds Eye View of Burlington, Vermont*, with the Burlington Railyard Enterprise Project study area indicated.

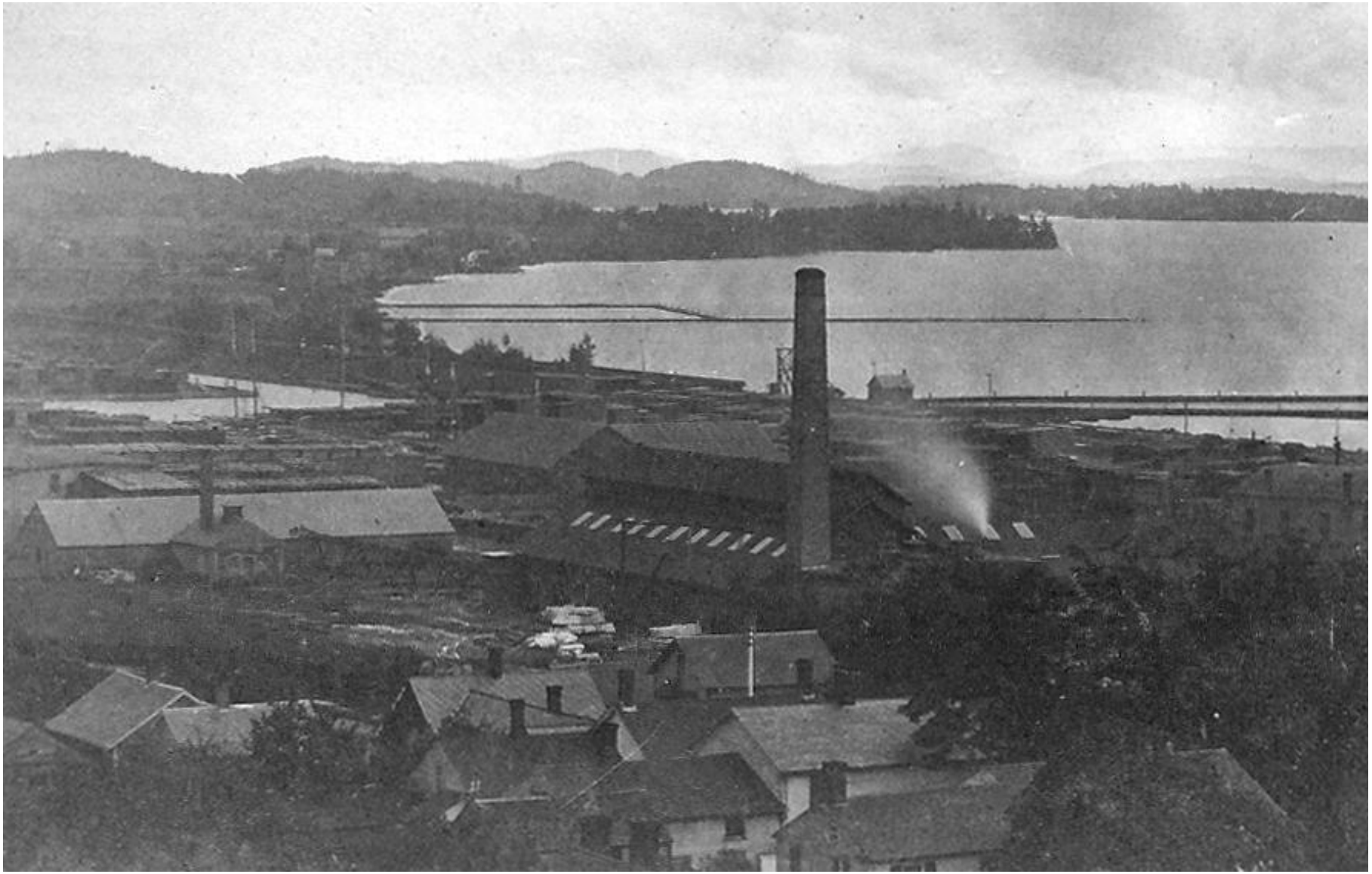

Figure 8. Stereoview ca. 1870s looking southwest over the Burlington Railyard Enterprise Project study area (Private Collection).

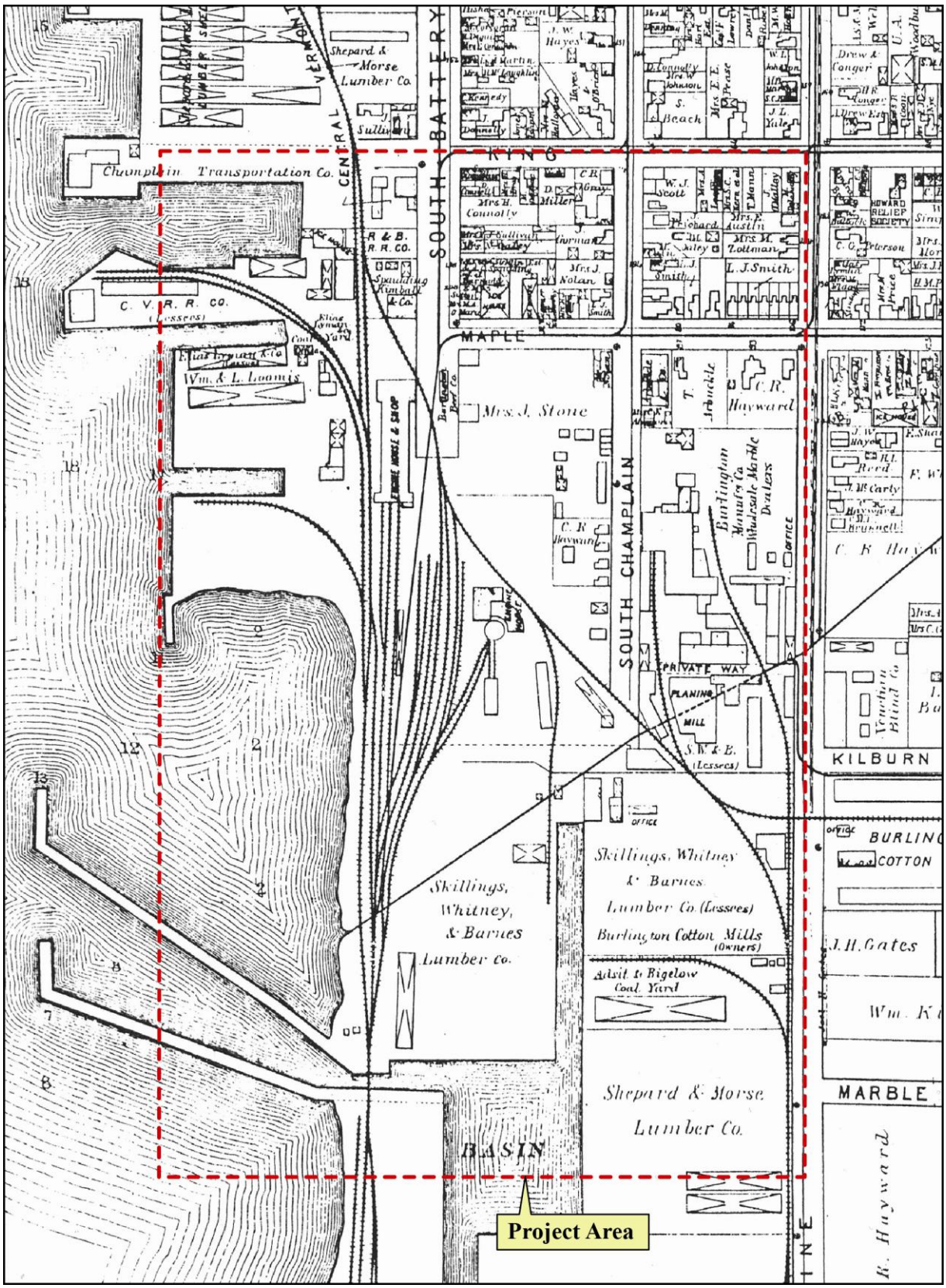

Figure 9. Detail from Hopkins' 1890 *Map of the City of Burlington, Vermont*, with the Burlington Railyard Enterprise Project study area indicated.

The railroads also allowed for the expansion of other heavy industries within the project area. The Burlington Manufacturing Company was incorporated in 1865, initially with a view of working iron. To this end they built a rolling mill and nail factory within the project area south of the corner Pine and Maple streets ca. 1865-1866 (Beers 1869; Rann 1886:473). At the time the nail factory was described as follows:

> …the building is a substantial brick structure measuring one hundred and forty-four by forty-five feet. An engine of 80 horse power, gives motion to a long shaft and drum running through the whole building lengthwise, to which are belted the nail machines, forty-six in number. The furnaces are fitted to burn shavings from the planning mills, and the draft from them is through a flue running 300 feet underground to the great chimney of the rolling mill . . . it will give employment to seventy hands and will turn out 300 kegs or fifteen tons of nails a day. The rolling mill has been for several weeks occupied night and day in turning out the long cherry colored ribbon which when cooled and cut up into foot lengths make the nail plates from which the nails are cut" (*Burlington Free Press* January 20, 1866).

The newspaper confidently predicted that, "other branches will be added next season. The foundations of a mill 200 by 73 feet for rolling boiler plate, are already laid, and machinery is ready for erection as soon as the building is ready for it. The foundations of two smaller buildings for the manufacture of Bessemer Steel are also ready. The company also proposes to erect in the spring a store house 125 by 50 ft" (*Burlington Free Press* January 20, 1866).

In April of 1870, a fire destroyed the Burlington Manufacturing Company's nail factory (*Burlington Free Press* April 29, 1870). This event changed the focus of the company. By November 1871, the company had replaced the former works with a marble mill. The local paper reported the factory was to start with four gangs and had room for up to sixteen gangs (to be located on the first floor, while the second floor was reserved for a machine shop). The factory was powered by a 150 horsepower Corliss engine that had a sixteen foot wheel and a thirty-one inch belt. The mill could process five to seven tons of Brandon marble, using water pumped direct from the lake to an overhead tank and sand supplied from the Lake shore. The building was heated by escape steam from five boilers, which were fed by wood shavings (*Burlington Free Press* November 21, 1871). By the 1880s, this factory operated twelve gangs of saws and employed seventy men (Child 1882:105). The company specialized in flooring tiles and wainscoting and had extensive sales including numerous government contracts (Rann 1886:473). In addition, the company added several other buildings for other tasks to their complex. In 1872 it was reported that Shepard, Davis, & Co. (lumber) "will lease of Mr. L. Barnes, next summer, south of the marble mill, a new planning mill ninety by one hundred feet to be built by the Burlington Manufacturing Company, which will dress their lumber at the Basin and will also furnish shavings to the marble mill" (*Burlington Free Press* December 30, 1871). In 1872, a "fire was discovered in the new planing mill of the Burlington Manufacturing Company [then leased to Shepard & Davis for planning and to Mathews & Davis box manufactures] situated just south of the paper mill and near the marble mill, where the stream power employed in the three buildings is located" destroyed along with three railroad cars (*St. Albans Messenger* December 18, 1872).

In the spring of 1875, the J.W. Goodell Company's marble and granite works was established next to the Burlington Manufacturing Company site, fronting on the west side of Pine Street (Child 1882:104). A period description of their works is as follows: "their buildings, which cover an area of several thousand square feet, are admirably located for conveniently carrying on this manufacture, as the railroad passes right by the door, affording an easy mode of shipping and receiving goods, also situated near the lake, from which a constant supply of water may be pumped, an item extremely essential in sawing and polishing marble" (Child 1882:104). In the 1880s, it was reported that "two hundred men are employed here continually, night and day" (Child 1882:104).

In 1889, the Porter Manufacturing Company (established 1881) "dealers in screen doors and window frames of their own make" occupied the area at the southwest corner of Battery and King streets for an office, packing shop, screen manufacturing shop, and storage, but the company had moved on by 1893 (Rann 1886:470; Sanborn Mapping and Publishing Company 1889 and 1894).

In the mid-1800s, the residential portion of the project area evolved as demand for housing rose, as city services such as water and sewer became available, as new building technologies were employed, and as new architectural tastes became fashionable. These trends led to the replacement of and/or addition to many of the older structures and to the further subdivision of the historic house lots. As early as 1853, it was noted that "the old wooden shells and piles of tinder in the shape of houses relics of the first settlement of Burlington, are fast vanishing from the place" (*Burlington Free Press* October 4, 1853). In 1866, the local newspaper noted that with the increase in industry, as exemplified by the Burlington Manufacturing Company, "the only thing which can delay these enterprises, one and all, is the scarcity of houses for mechanics and laborers, and that is a want to the supply of which our citizens must address themselves in earnest" (*Burlington Free Press* January 20, 1866).

In the mid-to-late 1800s, the residential area was still very much linked to transportation, and mercantile interests, but now showed increased diversity. Some of the individuals indicated as living (or owning property) in the area on historic maps included: P.D. Ballou (mayor of the city and candy maker); Thomas J. Curtis (Rutland Railroad engineer); Horace W. Smith (master carpenter and slater); Loomis Smith (roofer); William J. Scott (a traveling railroad agent); J. Mc Williams (wholesale grocer); Martin Daily/Daley (laborer / railroad employee); David Miller (livery stable / hackman); Nathaniel Parker (furniture dealer); Amasa Drew (meat market); A. J. Murphy (merchant); Isaac Nye (merchant); Michael Delehanty (employee of the Burlington Manufacturing Company); Clark Nellis (crockery merchant); John Gorman (peddler / travel agent); John Nolan (baggage master); John Hickey (laborer); John O'Mara (peddler); Jacob Maeck (lawyer); Henry Rolfe (lumber agent); several widows including Mrs. Loomis, Mrs. Julia Nolan, Mrs. Austin, and Mrs. Zottman; and Charles R. Hayward (?-1893) (officer of the Burlington Manufacturing Company and a partner in the J.W. Goodell Company, who had a home on the former site of the Burlington Manufacturing Company's offices at southeast corner of Pine and Maple streets). In the 1870s-1880s there also appears to be an increase in tenements or multi-family structures within the project area. For example, there were several large tenements located behind the stores on Battery Street (indicated on Sanborn maps). Gray's carriage shop and the former brewery had also been converted into tenements around this time, and in 1885, the distinctive row house at #94-106 Maple Street (Battery Street Historic District

No. 35) was built by Loomis J. Smith. His father, Horace Smith, who had founded the construction company, reportedly lived in the neighboring house at #88 Maple Street (Battery Street Historic District No. 35) for many years, on the site of the Central Railroad tracks.

Burlington's lumber industry began a substantial decline in the 1890s as imports from Canada fell dramatically. In response, a few older, already successful businesses expanded into the Burlington Railyard Enterprise Project study area at the turn of the 20th century, along with a few new ventures. The Burlington Beef Company (established ca. 1889) built a cold storage building in the road at the south end of Battery Street ca. 1889 (Burlington Board of Trade 1889:65-66; Sanborn Mapping and Publishing Company 1889 and 1900). "The Burlington Beef Co. are receivers and commission merchants in this City in Swift's Chicago dressed beef, mutton and pork, pure kettle-rendered lard, premium tripe, beef tongues, excelsior dried beef, Manchester hams, lamb's tongues and pigs' feet; and are wholesale dealers in all kinds of salt and smoked meats" (Burlington Board of Trade 1889:65-66). "The roomy premises of the company are located at the corner of Battery and Maple streets and are fully equipped with all of the latest improved refrigerators and cold storage" (Burlington Board of Trade 1889:65-66). In July of 1892, the Burlington Beef Company built a new building (#214 Battery Street; Battery Street Historic District No. 107) (now the Waterfront Dive Center) out of the road, measuring 85 x 21.5 ft in plan and housing the "most complete meat refrigerator in the state" (*Burlington Free Press* July 21, 1892).

In 1893, the well established wholesale grocery firm of Spaulding, Kimball & Co., built a new three story storehouse, 75 x 100 ft in plan, adjacent to the ca. 1827 Stone Store on Battery Street (#197 Battery Street; Battery Street Historic District No. 2) (*Burlington Free Press* September 7, 1893). In 1904-1905, the Vermont Spool and Bobbin Company (originally of Essex, Vermont, established ca. 1896) built and relocated to a "new factory . . . on the old marble mill property between lower Pine and Champlain streets" in Burlington (#234 South Champlain Street; Battery Street Historic District No. 125) (*Burlington Free Press* July 13, 1905). This two story factory built by E.F. Moore was entirely constructed of cement blocks and was estimated to have cost between $12,000 and $15,000 (*Burlington Free Press* July 13, 1905). The first section of the building was 153 x 151 feet, but additions were made to it in subsequent years (*Burlington Free Press* July 13, 1905). In 1914, the Holbrook Grocery Company of Keene, New Hampshire, bought a vacant lot with 200 ft frontage on the south side of Maple Street "in the spring will erect a building on the site" for the Wholesale business (*Burlington Free Press* January 22, 1914). Shortly afterwards, the Holbrook Grocery Company merged with the Burlington Grocery Company [established ca. 1893] and occupied "the new warehouse located on Maple Street which is without a doubt, the finest for the wholesale grocery business in New England (#47 Maple Street; Battery Street Historic District No. 106). It has a capacity of 400 cars with a side track to unload four cars at a time" (*Burlington Free Press* October 12, 1916).

Throughout all of these changes, however, the railyard within the project area not only persisted, but thrived. The original railroad roundhouse burned sometime between 1912 and 1916, and a new roundhouse was built ca. 1916-1917, just southwest of the original location (Lavalley Lane; Pine Street Historic District No. 3b). In 1917 it was reported that, "on account of the great increase in the amount of freight carried over the railroads, the Rutland Railroad company has found it necessary to make many extensions all over its property. The tracks in the yard have been extended in order to give more room for storage and new scale tracks and an

engine house have been built. The scale tracks are immediately north of the drawbridge and are very modern, being able to weigh all kinds of cars, including the newer heavier ones. The engine house is north of the drawbridge and west of the main line. The foundation of the turntable has been laid and is long enough to accommodate the largest Pullman cars. The sand for this foundation was drawn from Colchester Point. It was also necessary in making the track extensions to fill in land to provide for the new tracks. A new ice house has also been built immediately south of the drawbridge. It is expected that the engine house and turntable will be ready by fall" (*Burlington Free Press* July 26, 1917).

New businesses with new structures included the 1919 Champlain Valley Fruit Company (#241-243 South Champlain Street; Pine Street Historic District No. 10) and the ca. 1923 National Biscuit Company (Nabisco) (#266 South Champlain Street; Pine Street Historic District No. 11). A replacement building for the Burlington Coal & Ice Company was built in 1926 (#52 Maple Street; Battery Street Historic District No. 93).

In ca. 1926, the G.S. Blodgett Company, which was established in Burlington in 1854 (as Blodgett & Sweet) to produce patent "galvanized portable ovens for bakers, hotels, steamships and private families," and which also dealt in furnaces as well as steam and gas fittings, constructed a factory within the project area on the south side of Maple Street (#57 Maple Street; Battery Street Historic District No. 105) (Burlington Board of Trade 1889:51; Rann 1886:473; Sanborn Mapping and Publishing Company 1942).

Facilities for the bulk storage of fuel were built in former lumber yards. Specifically, the Citizens Coal & Oil Company was established ca. 1900 near the north end of the Basin; their office was located to the south on the west side of Pine Street (#377 Pine Street; Pine Street Historic District No. 32). In addition, in the late 19th and early 20th centuries the now open spaces of the project area became the site of city facilities. For example, the City of Burlington established a stone crusher immediately south of the former Beckwith Coal & Wood Yard dock (which had become Elias Lyman Coal Company) by 1906, and then established an asphalt plant at the location by 1926. Later, the Burlington Street Department's facility was constructed as a WPA project on Pine Street in 1934 (#339 Pine Street; Pine Street Historic District No. 28). During this time, there was also a trend to reuse of older buildings for new purposes. For example, a steam laundry was established ca. 1926 in part of a former granite company building on Pine Street (#257-277 Pine Street; Pine Street Historic District No. 21) and the National Paper Tube and Box Company took over the former Arbuckle Cigar & Candy Company building (#75 Maple Street; Battery Street Historic District No. 104) around 1919. The Vermont Fruit Company established itself c. 1930 at the northeast corner of Battery and Maple streets (#212 Battery Street; Battery Street Historic District No. 6).

In the early 20th century, within the more residential portion of the project area, formerly single family homes were split up into rental apartments / duplexes, and/or small businesses locations (e.g. grocery, barber shop, repair shop, bar, restaurant) with fairly high turnover rates. On the lake shore, bulk tank storage took over several of the former lumber and coal yards. In the latter 20th century, new city services, namely the waste treatment plant, took the place of the old rock crusher/asphalt plant. The former large, single company buildings were broken up into multiple independent office and/or store space (including the Burlington Coal and Ice building, the Holbrook Grocery warehouse, the Arbuckle building, the Spaulding Kimball & Company

warehouse, the Stone Store, the Vermont Fruit Company building, the Champlain Valley Fruit Company's complex and the National Biscuit building), while the former factories were turned into condos or apartments (as in the case of the Vermont Spool and Bobbin factory and the Blodgett Oven factory). In addition, new condos were built in the limited available open space, and large residential additions were added to a few of the existing residential structures. A few new buildings for business were also constructed, such as Curtis Lumber, which stands on the site of Barnes and Holt Spool and Bobbin, built ca. 1885 and destroyed by fire in 1980. Most recently, in the early 21st century, a couple large commercial structures have been built within the study area, including the building at the southeast corner of King and Battery streets, and one along the west side of Battery Street.

HISTORIC RESOURCES, SIGNIFICANCE AND POTENTIAL EFFECTS

The Burlington Railyard Enterprise Project area lies entirely within two historic districts, the National Register-listed Battery Street Historic District, at the project area's northern end, and the National Register-eligible Pine Street Historic District, at the southern end of the project area (Figure 10). Within the entire project area, there are a total of 59 contributing resources; 44 within the Battery Street Historic District, and 15 within the Pine Street Historic District (two resources within this District contain multiple buildings / structures). Historic construction time periods dating from the early 19th century through the early 20th century are represented by the two Districts (Figure 11). The project area portion of the Battery Street Historic District retains many of its 19th century resources, while the portion of the Pine Street Historic District within the project area is almost entirely representative of early 20th century construction, due to the fact that this area was predominantly occupied by the lumber industry during the mid to late-19th century, which had declined significantly by the turn of the century (Figure 12).

Each Historic District and individual resources within the districts, are summarized below, including representative current photographs and historic images. The significance of each Historic District is also summarized and potential effects are discussed. Appendix I summarizes each historic resource in table format.

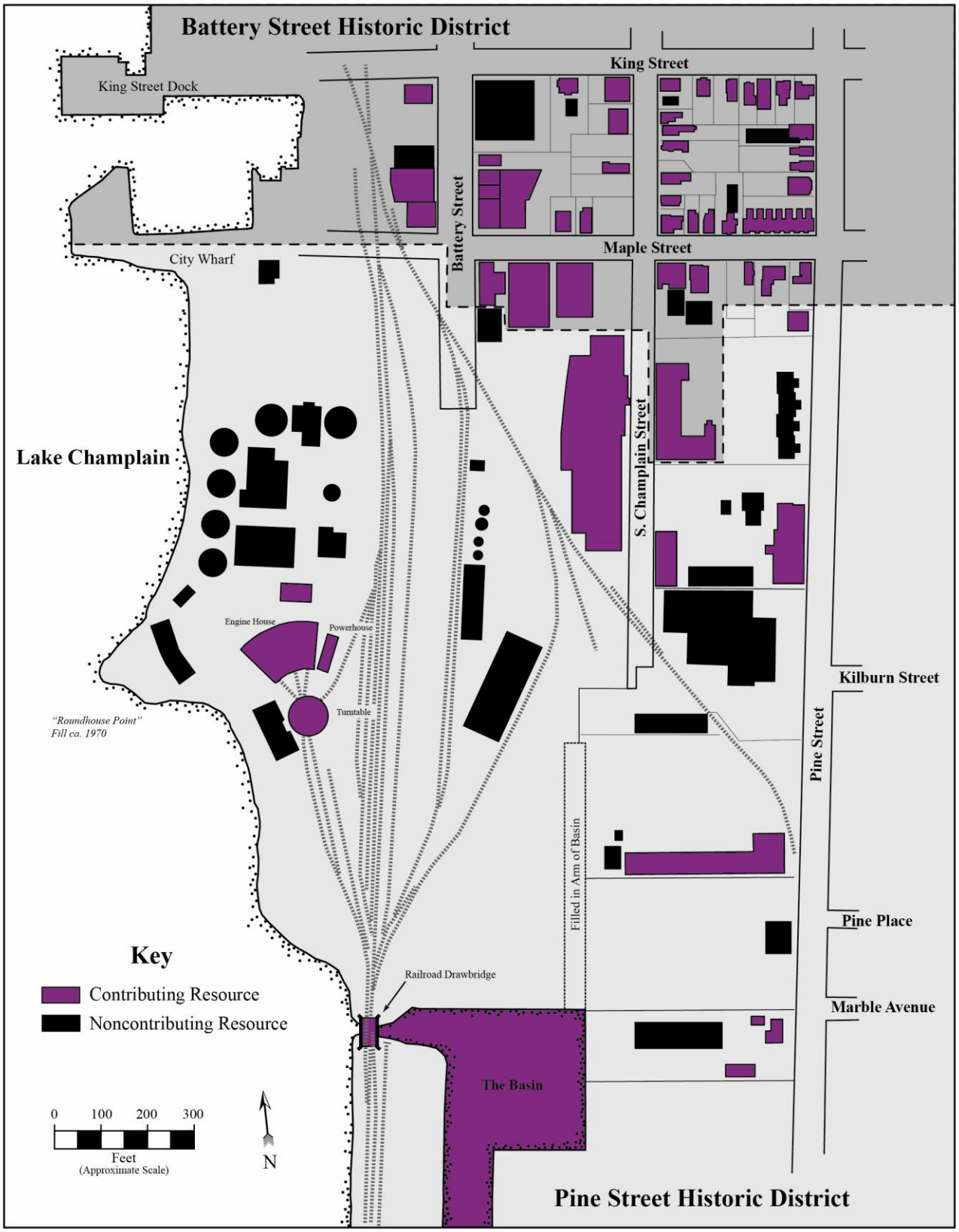

Figure 10. Map showing the location of Historic Districts within the Burlington Railyard Enterprise Project area (Battery Street Historic District in dark gray, Pine Street Historic District in light gray).

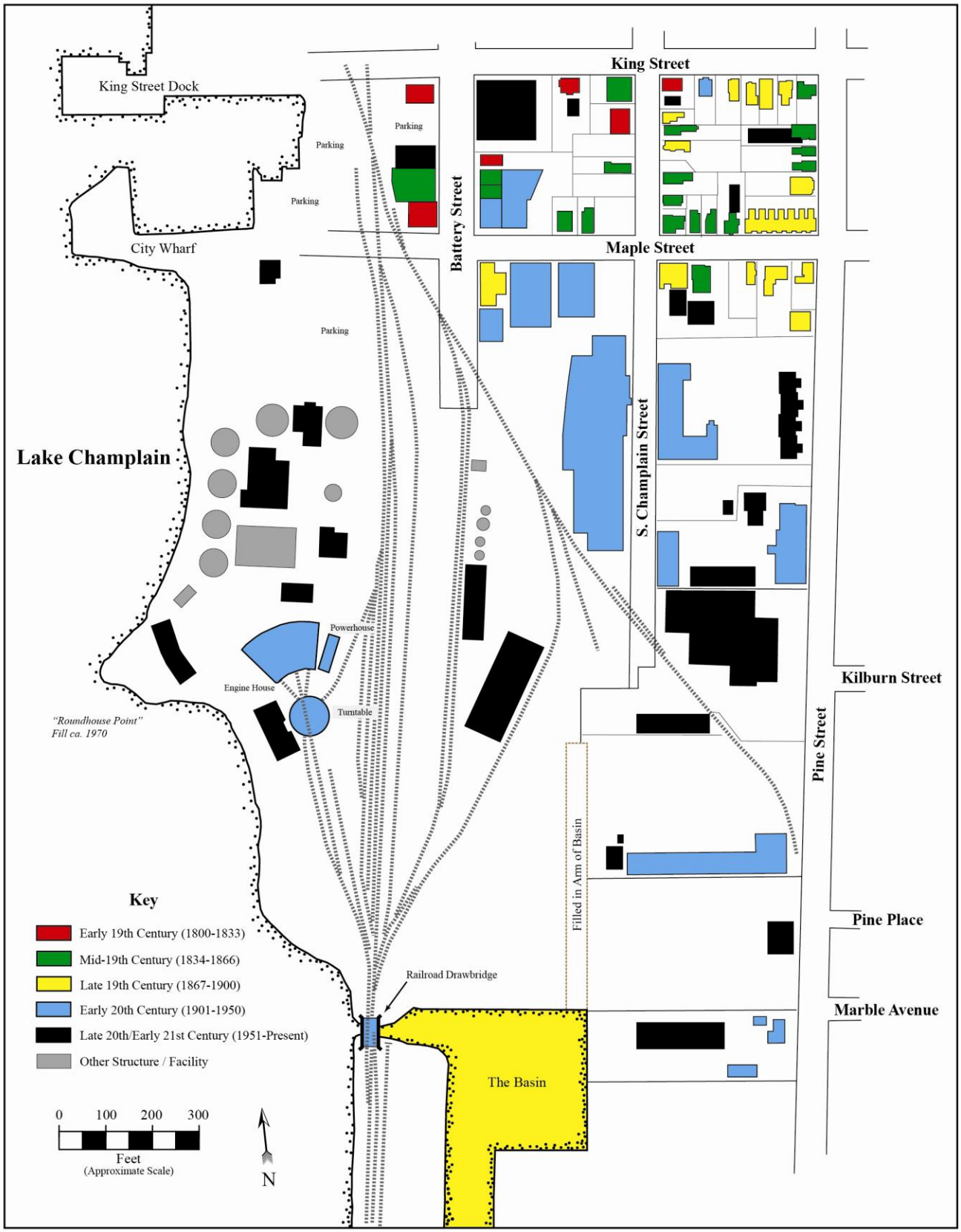

Figure 11. Map showing the general construction time periods of existing buildings within the Burlington Railyard Enterprise Project area.

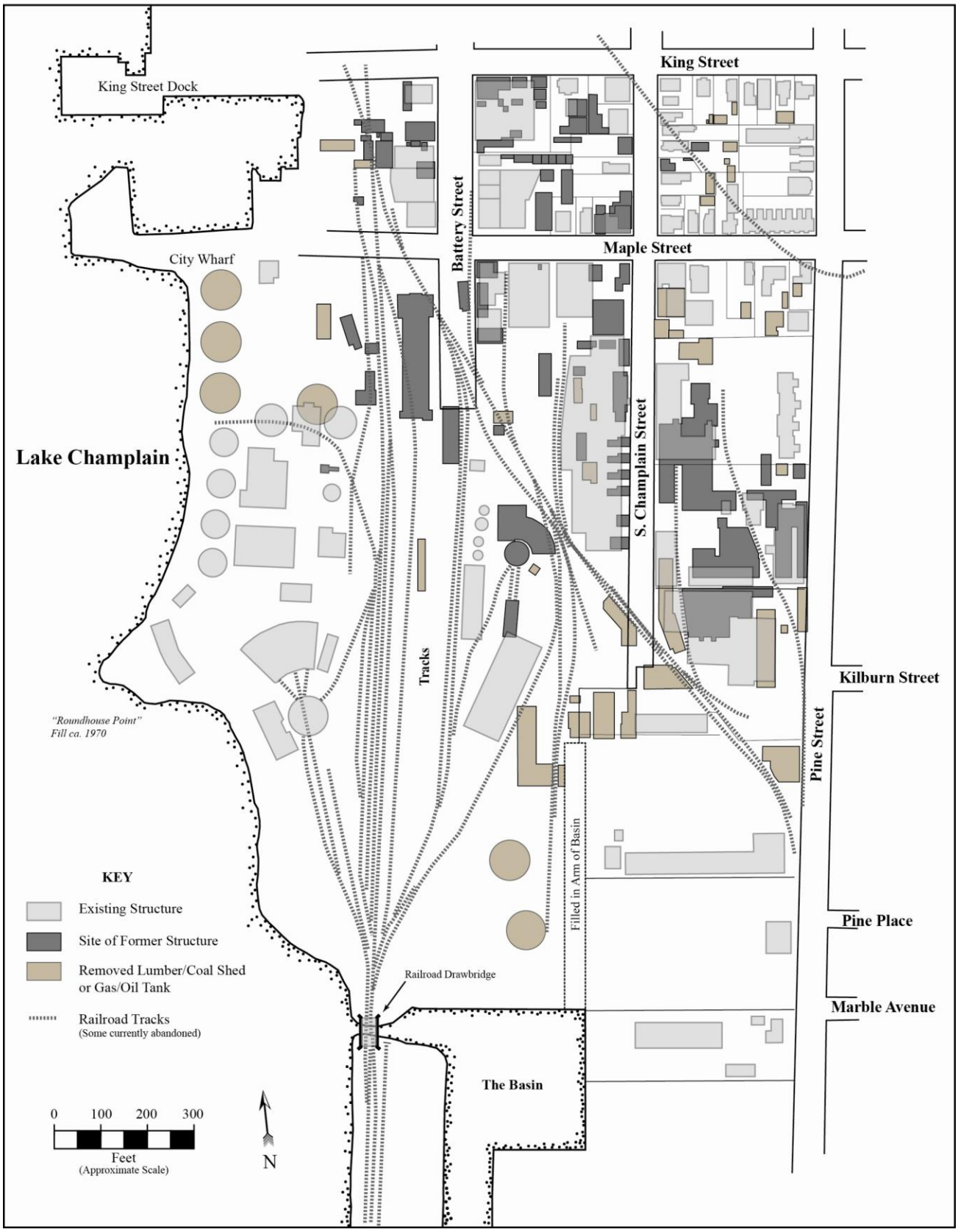

Figure 12. Map showing existing and former buildings and structures within the Burlington Railyard Enterprise Project area.

Battery Street Historic District

National Register of Historic Places, Listed 1977(#77000098) and 1984 (#84003459, boundary increase)

Vermont Division for Historic Preservation, Historic Sites and Structures Survey, 1977: *Burlington Street Surveys; King Street, Maple Street, Pine Street*

Description: The Battery Street Historic District (Figure 13) includes residential, commercial and light industrial sections within a grid created by Battery, Champlain, Pine, St. Paul, Maple and King streets, and Lake Champlain. Streets in the District are laid out in a standard grid pattern and buildings are sited on narrow lots. Buildings in the District represent a broad spectrum of architectural styles, with at least one outstanding example of each major style from the early 19th through the early 20th centuries represented. The growth and development of Burlington is reflected in these architectural styles and in the historic uses of the buildings. The majority of the commercial and light industrial buildings are concentrated along Battery and Maple streets. The portion of the Battery Street Historic District that lies within the Burlington Railyard Enterprise Project area (Figure 14) reflects the overall character and setting of the District. Some of the more notable District buildings that lie within the project area include (building numbers correspond to National Register Nomination-assigned resource numbers): (1) Stone Store, ca. 1827; (2) Commercial Block, ca. 1893; (7) Merchant's Bank, ca. 1850; (9) Musicant Building, ca. 1848; (19) Gray's Carriage Works, ca. 1848; (27) School House, ca. 1850; (35) Worker's Row Housing, 1885; (80) Gideon King Jr. House, ca. 1830; (104) Arbuckle Industrial Building, 1885; (105) Blodgett Oven Company Commercial Block; (106) Grocery Warehouse, ca. 1915, and; (125) Vermont Spool and Bobbin Mill, 1905 (Figures 15 – 38).

Statement of Significance: The Battery Street Historic District is significant as one of Burlington's earliest settlements, representing an area of mixed commercial, light industrial and residential use which evolved from ca. 1790 up to the present. Buildings in the District preserve a variety of architectural styles and types, with architecture from the Federal style to early 20th century styles providing a historic document of the city's development, growth and history. The Battery Street Historic District was added to the National Register of Historic Places on November 2, 1977, with a boundary increase added on June 6, 1984. Although some changes have taken place in the District, including the loss of several buildings within the project area (National Register resource numbers 10, 82 and 81 at the southeast corner of King and Battery streets, and numbers 17 and 90 at the northwest corner of Maple and South Champlain streets), and the addition of other buildings, the District retains its integrity of location, design, setting, workmanship, feeling and association and is considered a significant historic resource.

Potential Effects: Given the density of historic buildings, along with their shallow setbacks from sidewalk and street edges, and the overall, tight and narrow grid pattern of roads within this part of the Battery Street Historic District, any proposed alternatives for access and circulation to and within the study area here have the potential to adversely affect historic resources, unless improvements could be kept within existing road right-of -ways. Also, the residential nature of much of this area would be more sensitive to indirect effects caused by potential project work, for example increased noise or headlight beams from changes in traffic patterns, and traffic / crossing signals.

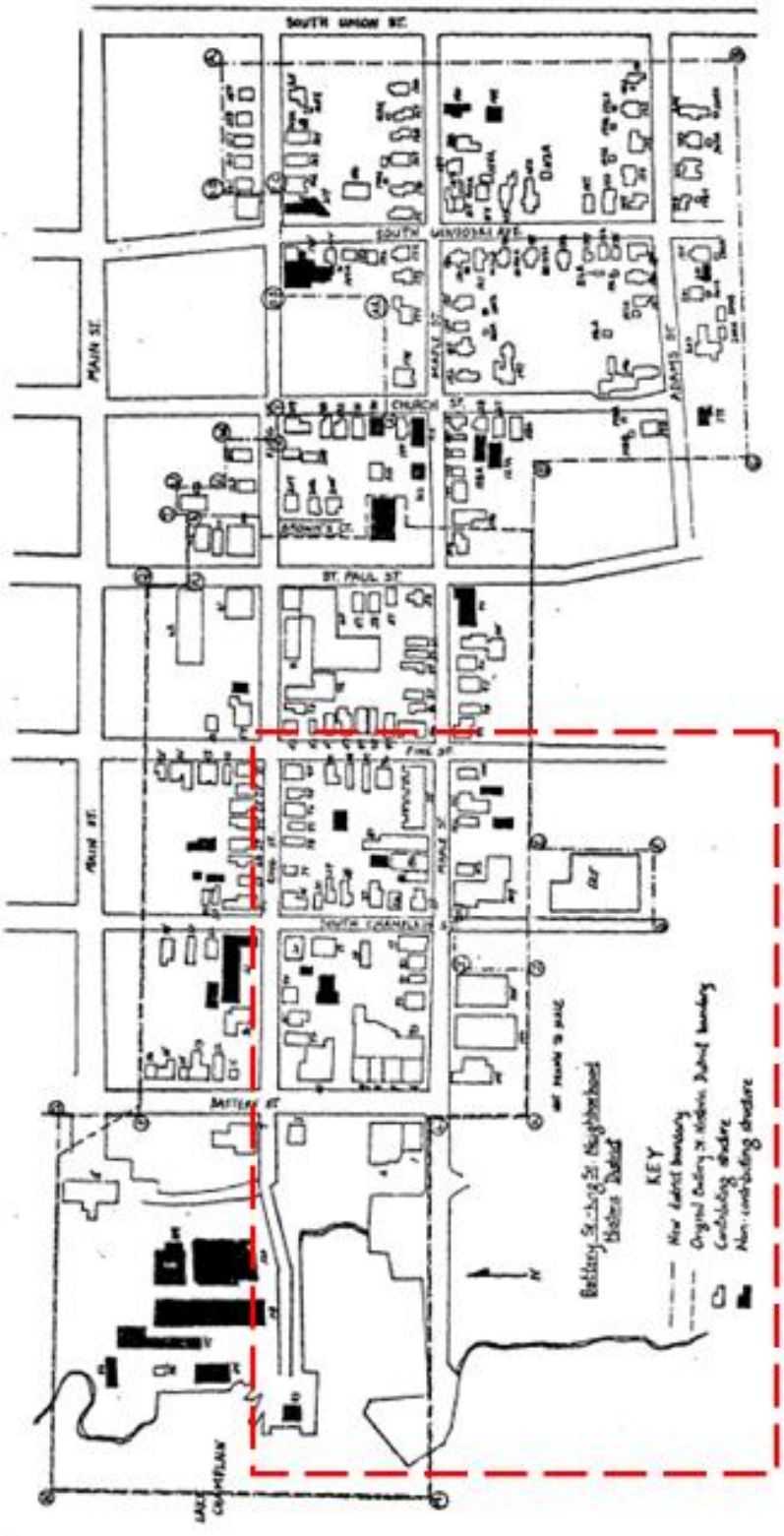

Figure 13. National Register Nomination sketch map of the Battery Street Historic District (as amended 1984), with the approximate location of the northern portion of the Burlington Railyard Enterprises project area indicated in red (NPS 1984).

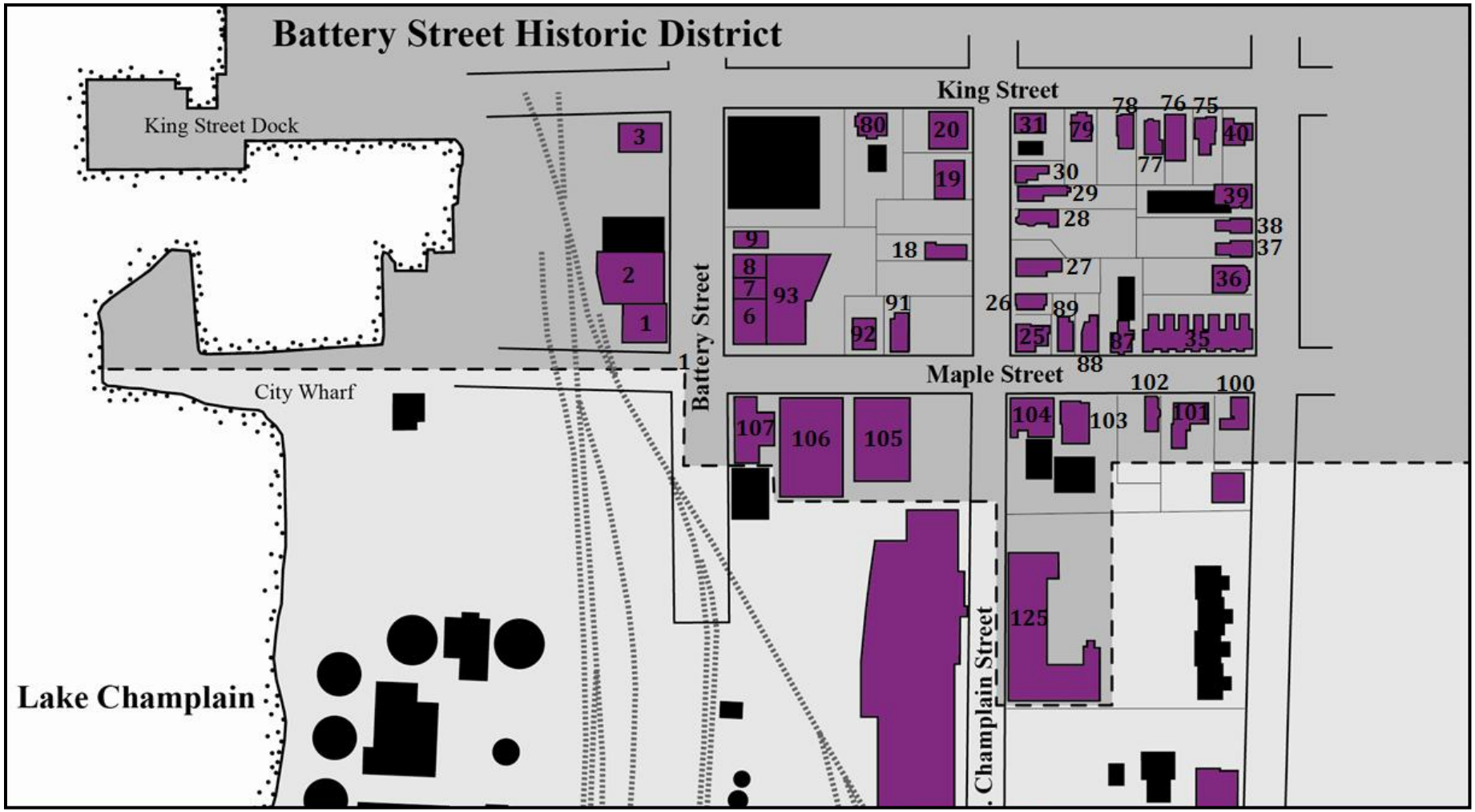

Figure 14. Map detail showing portion of the Battery Street Historic District (dark gray shading) that lies within the project area; building numbers correspond to National Register Nomination-assigned resource numbers (north at top of map).

Figure 15. View northwest of Stone Store (1) at northwest corner of Battery and Maple Streets.

Figure 16. View southwest of building along the west side of Battery Street; Stone Store (1) at left, Commercial Block (2) at center.

Figure 17. View north of the Isaac Nye Paint Shop (3) along the west side of Battery Street.

Figure 18. View southeast of buildings along the east side of Battery Street; Musicant Building (9) at left and Merchant's Bank (7) at center (tallest building).

Figure 19. View northeast of the Vermont Fruit Company building (6) at center, and Burlington Coal & Ice building (93) at right, at the northeast corner of Battery and Maple streets.

Figure 20. View southeast of buildings along the south side of Maple Street: Burlington Beef Company (107) at foreground right, Grocery Warehouse (106) at center, then, Blodgett Oven Block (105) to left, and Arbuckle Building (104) in left far background.

Figure 21. Historic view (1933) looking east down Maple Street; Burlington Coal & Ice Company building (93) at left, and Grocery Warehouse / "IGA Stores" (105) at right (UVM Special Collections, McAllister Collection).

Figure 22. Historic view (1936) looking southwest on Maple Street, Grocery Warehouse (105), "IGA Stores" at left foreground, Burlington Beef Company (107) at right background (UVM Special Collections, McAllister Collection).

Figure 23. View southwest of the Blodgett Oven Company building (105) at center and Grocery Warehouse (106) to right, along the south side of Maple Street.

Figure 24. View northeast of houses (92 at left, 91 to right) along north side of Maple Street.

Figure 25. View northeast of buildings along east side of South Champlain Street; School House (27) at right.

Figure 26. View southwest of Gray's Carriage Works building (19) along west side of South Champlain Street.

Figure 27. Historic view (ca. 1885) looking southwest of Gray's Carriage Factory (19), converted to apartments, located along the west side of South Champlain Street (Courtesy UVM Special Collections).

Figure 28. View south of the Gideon King Jr. House (80) along south side of King Street.

Figure 29. View southeast of the Captain White House (31) along south side of King Street.

Figure 30. View southeast of buildings along south side of King Street, duplex (79) at right.

Figure 31. View southwest of houses along west side of Pine Street (39) at right, (38) at left.

Figure 32. View west down Maple street; Worker's Row Housing (35) Maple Street at right.

Figure 33. Historic view (1933) looking west down Maple Street, Worker's Row Housing (35) at right (UVM Special Collections, McAllister Collection).

Figure 34. View northwest of Worker's Row Housing (35) along north side of Maple Street.

Figure 35. Historic view (ca. 1930s) looking northwest at Worker's Row Housing (35) along north side of Maple Street (UVM Special Collections, McAllister Collection).

Figure 36. View northwest of the Arbuckle Cigars/Candy Company building (104) at the southeast corner of Maple and South Champlain streets; tenement house (103) at left.

Figure 37. Historic drawing (ca. 1889) of the Arbuckle Cigars/Candy Company building (104) at southeast corner of Maple and South Champlain streets (Burlington Board of Trade 1889).

Figure 38. View northeast of the Vermont Spool and Bobbin Mill (125) along east side of South Champlain Street.

Pine Street Historic District

Vermont Division for Historic Preservation, Draft National Register of Historic Places Nomination, prepared 2013 (not submitted to date)
Vermont Division for Historic Preservation, Historic Sites and Structures Survey, 1977: *Burlington Street Surveys; Pine Street, Rail Yards, South Champlain Street*

Description: The Pine Street Historic District (Figure 39) represents a spectrum of industrial, commercial, public and residential architecture dating from ca. 1869 to the mid-20th century. The District is situated along both the east and west sides of Pine Street, between Maple Street to the north and Howard Street to the south. It is bounded by Lake Champlain on its western edge and by St. Paul Street to the east. This area developed as an early industrial and manufacturing center along Burlington's waterfront and railyard; it was used extensively by lumber yards and lumber manufacturing during the latter half of the 19th century, but by the close of the 1800s was supporting numerous manufacturing industries, especially as the lumber business declined. Today, much of the area has been redeveloped; historic buildings have been reused for retail and office space, and trees and sidewalks have been added. The portion of the Pine Street Historic District that lies within the Burlington Railyard Enterprise Project area (Figure 40) reflects the overall character and setting of the District. It contains a mix of public, residential, commercial and industrial buildings and structures (building / structure numbers correspond to draft National Register Nomination assigned resource numbers): (2h) Garage, 1951; (3) Railyard, 1849; (3b) Engine Roundhouse, 1916-18; (3c) Turntable, ca. 1940; (3d) Pumphouse / Boiler Room, ca. 1920; (10) Champlain Valley Fruit Company, 1919; (11) National Biscuit Company, 1923; (15) Dwelling, ca. 1895; (21) Bullocks Standard Steam Laundry, ca. 1925 / J.W. Goodell Stone Manufactory, ca. 1912; (28) Burlington Street Department, 1934; (32) Citizens Coal and Oil, 1900; (32a) Wagon Shed, ca. 1906; (32b) Stable/Carriage Barn, ca. 1910; (33) Pine Street Barge Canal Basin, 1868; (34) Drawbridge, 1919 (Figures 41 – 55). There are also several historic archaeological sites within the project area that are part of the District.

Statement of Significance: The Pine Street Historic District is significant for its relationship to the development and evolution of the lumber industry in Burlington and for its continued importance as the city's main industrial corridor into the 20th century. The Pine Street corridor is also the most significant remaining site of industry within the city today, and as such, preserves an important part of Burlington's history and identity. Structures and buildings associated with the railroad, and buildings such as dwellings, function today as they did in the past. Other buildings that remain from this history have taken on new uses over the years to keep them productive and sustainable. Overall, the resources of the Pine Street Historic District retain historic integrity of location, design, setting, materials, workmanship, feeling and association and the District is considered eligible for inclusion on the National Register of Historic Places.

Potential Effects: Historic resources associated with the Pine Street Historic District that fall within the Burlington Railyard Enterprise Project area have the potential to be adversely affected by project work, especially if proposed alternatives for access and circulation directly impact any of the buildings or structures (for example, necessitating their removal, relocation or alteration). Such impacts should be avoided if feasible. The portion of the District that lies to the west of Pine Street within the project area may be more amenable to project plans given its industrial / commercial / public character, the more scattered location of buildings, the lack of residential buildings, and the greater open (non-built) space. Other factors here, such as rail lines and archaeological sites, will also have to be considered, however.

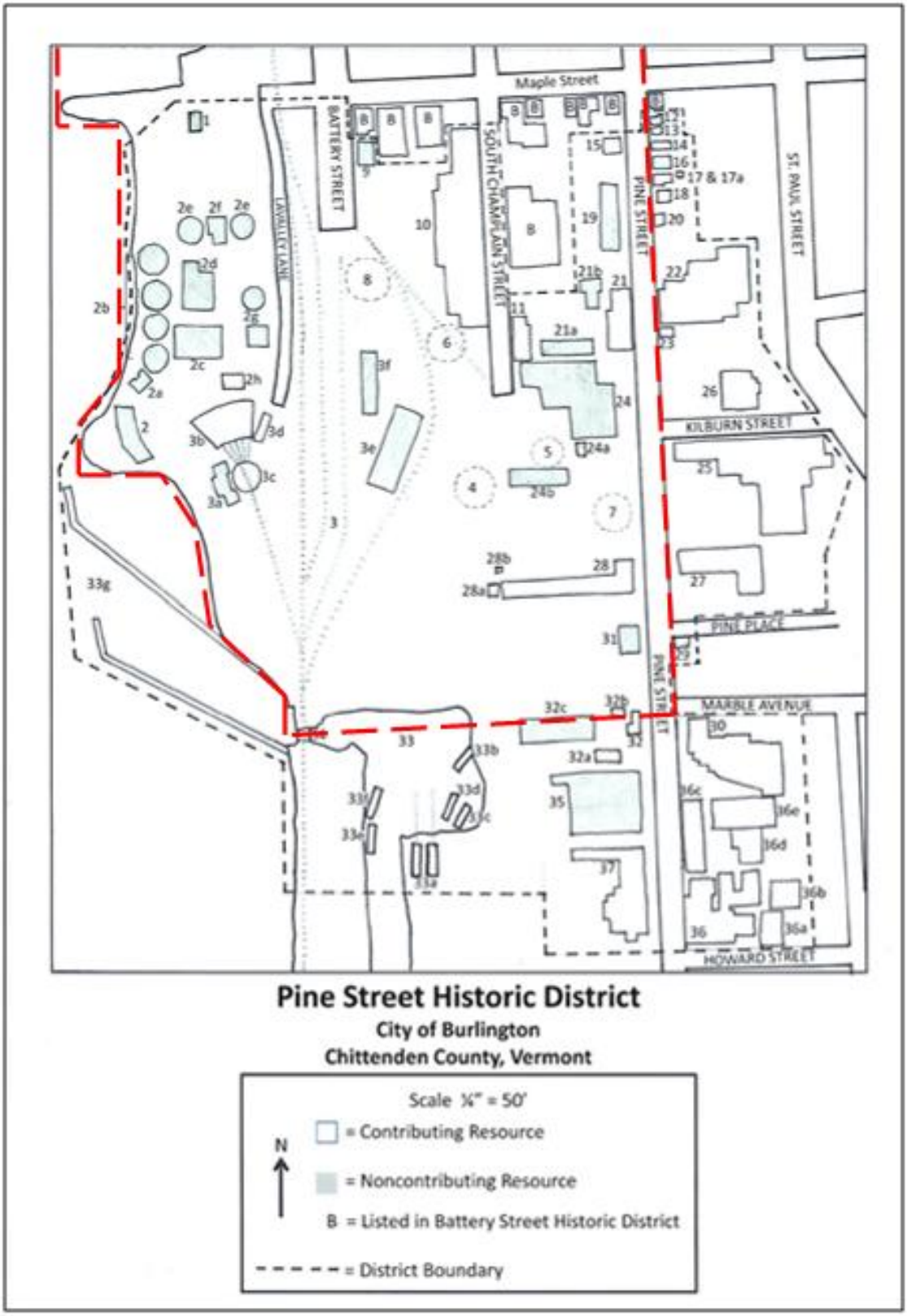

Figure 39. Sketch map of the Pine Street Historic District with the approximate location of the southern portion of the Burlington Railyard Enterprises Project area indicated in red.

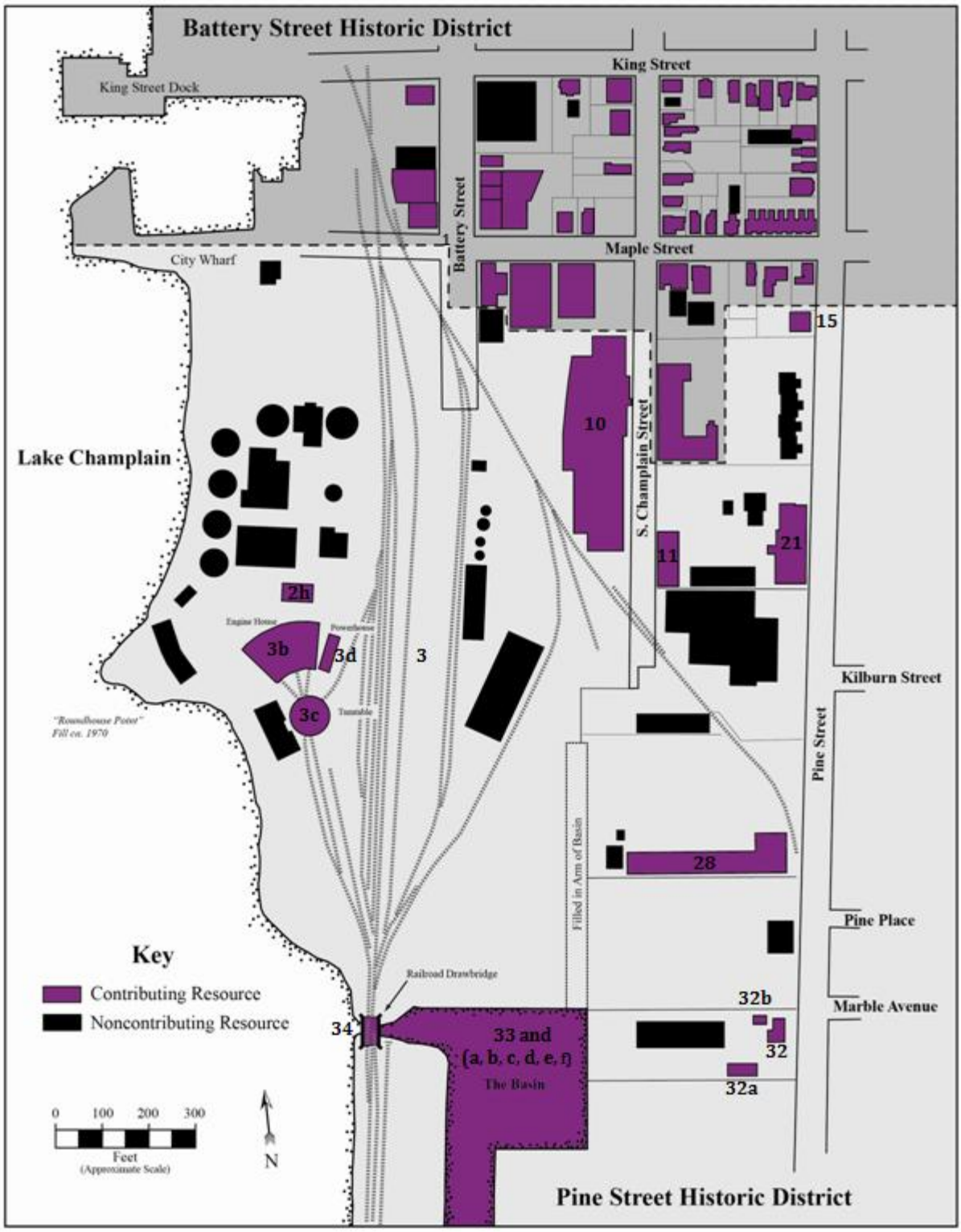

Figure 40. Sketch map of portion of the Pine Street Historic District (light gray shading) that lies within the project area; building numbers correspond to draft National Register Nomination-assigned resource numbers.

Figure 41. View west of the Citizens Coal and Oil Company office (32), at right, and Wagon Shed (32a), at left, along west side of Pine Street.

Figure 42. View northwest of Burlington Street Department (28) along west side of Pine Street.

Figure 43. View southwest of north side of the Burlington Street Department (28).

Figure 44. View southeast of north side (east end) of the Burlington Street Department (28).

Figure 45. Historic view (ca. 1934) looking southwest of the Burlington Street Department (28) (UVM Special Collections, McAllister Collection).

Figure 46. Historic view (ca. 1942) looking southwest of the Burlington Street Department (28) (UVM Special Collections, McAllister Collection).

Figure 47. Historic view (1942) looking west, Pine Street in foreground, Burlington Street Department (28) at left (UVM Special Collections, McAllister Collection).

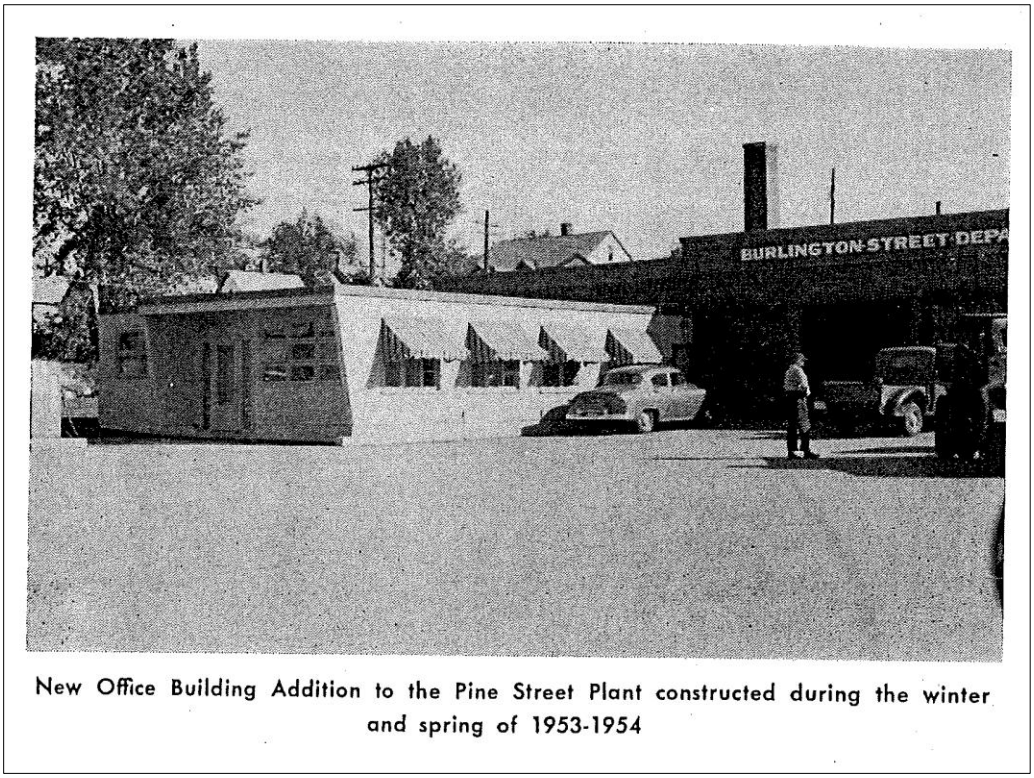

Figure 48. Historic view (1954) looking southeast of an addition to the Burlington Street Department (28) (Burlington Annual Report 1954).

Figure 49. View southwest of the Bullocks Standard Steam Laundry / Goodell Granite building (21) along the west side of Pine Street.


Figure 50. View southeast of the National Biscuit Company (11) along the east side of South Champlain Street.

Figure 51. View northwest of the Champlain Valley Fruit Warehouse (10) along the west side of South Champlain Street.

Figure 52. View southeast of the Railroad Drawbridge (34) at the former canal entrance to the Basin, along Lake Champlain.

Figure 53. View southeast of the Railroad Engine House (3b) on Lavalley Lane.

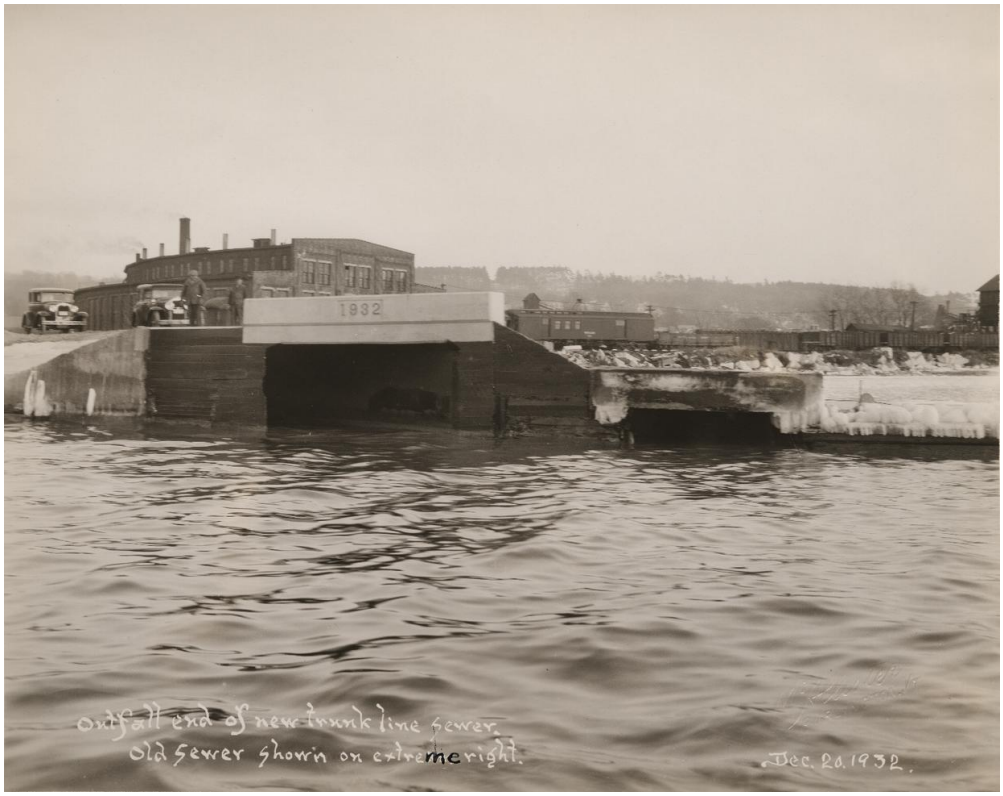

Figure 54. Historic view (1932) looking southeast of new sewer outfall with the Railroad Engine House (3b) in background (UVM Special Collections, McAllister Collection).

Figure 55. Historic view (1944) looking southeast of the Railroad Engine House (3b) (UVM Special Collections, McAllister Collection).

Additional Section 4(f) Resources

If a Federal Highways Administration (FHWA) Section 4(f) review is required as part of the Burlington Railyard Enterprise Project (for example, if the project receives funding from or requires approval by an agency like FHWA), in addition to the historic resources identified above, two public recreational facilities within the project area, Perkins Pier (Figure 56) and the Island Line Trail (Burlington Bike Path) (Figure 57) would also be considered Section 4(f) resources. Perkins Pier is a City of Burlington park / recreation area that is located at the foot of Maple Street. It contains a playground, picnic tables, seasonal boat slips, boat rentals, boat launch, and public restrooms, and is located along the Island Line Trail. The Island Line Trail is a 12.5 mile multi-use path that begins in Oakledge Park to the south of the project area. It enters the project area adjacent to the Pine Street Historic District's Railroad Drawbridge (34), and skirts the edge of Lake Champlain throughout the entire project area. The trail continues on along the waterfront and ends at South Hero, north of Burlington.

Any impacts to ("use of") these resources would have to be considered as part of a Section 4(f) review. Given the location of Perkins Pier and the bike path along the shore of Lake Champlain, it is unlikely that any direct use of these resources would occur as part of project work. Any indirect impacts resulting from project work ("constructive use") should not "substantially impair the activities, attributes or features" of the park or bike path, as such impacts would adversely affect the resources.

Figure 56. View southeast of Perkins Pier from Lake Champlain.

Figure 57. View north, towards Perkins Pier, along Island Line Trail / Burlington Bike Path.

SUMMARY

The City of Burlington with the assistance of Resource Systems Group, Inc., is conducting a Scoping Study of the proposed Burlington Railyard Enterprise Project, located along the eastern shore of Lake Champlain in Burlington, Chittenden County, Vermont. The project area lies entirely within two historic districts, the National Register-listed Battery Street Historic District, at the project area's northern end, and the National Register-eligible Pine Street Historic District, at the southern end of the project area. Within the entire project area, there are a total of 53 contributing resources; 44 within the Battery Street Historic District, and 9 within the Pine Street Historic District (two resources within this District contain multiple resources). Both Districts were determined to be significant historic resources and both are considered eligible for inclusion on the National Register of Historic Places.

For compliance under Section 106 of the National Historic Preservation Act of 1966 and its amendments, resources within each Historic District were evaluated for their potential to be affected by project work. As a result of this review, it was determined that the project has the potential to affect resources in both Districts. Based on its characteristics (for example, density of historic buildings, shallow setbacks, road grid pattern, and residential nature), the Battery Street Historic District appears to have the greatest potential to be adversely affected by the project. Standing historic resources associated with the Pine Street Historic District also have the potential to be adversely affected by project work; however, the portion of the District that lies to the west of Pine Street within the project area may be more amenable to plans for access and circulation given its industrial / commercial / public character, the more scattered location of buildings, the lack of residential buildings, and the greater open (non-built) space.

Once developed, a review of project plans will be necessary to determine project effects on the standing historic resources identified. Early coordination with the Vermont Division for Historic Preservation and the Vermont Agency of Transportation is also recommended.

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APPENDIX I: SUMMARY TABLE OF HISTORIC DISTRICT RESOURCES

Standing Historic Resources within the Battery Street and Pine Street Historic Districts, Burlington Railyard Enterprise Project Area, Burlington, Chittenden County, Vermont

RESOURCE NUMBER.	RESOURCE NUMBER	STREET ADDRESS	CURRENT / NAME / USE	HISTORIC NAME / USE	DATE BUILT	NOTES
BATTERY STREET HISTORIC DISTRICT						
1		209 Battery Street	Office/Retail Space	The Stone Store (store house); VanSicklin & Walker; Mayo & Follett; Follett & Bradley	ca. 1827 (north half) ca. 1841 (south half) Ref: NR Nom., Blow	South half of building and roof added ca. 1841.
2		197 Battery Street	Office/Retail Space, Bugatti Barbers	Spaulding, Kimball & Co. (wholesale grocers est. 1889); American Standard Plumbing and Heating; Shepard Supply Co	ca. 1894 Ref: NR Nom., BFP 1893	BFP 7 Sept 1893 says 'Spaulding and Kimball's three story storehouse is taking shape'. Sanborn Maps show built 1889 - 1894. On the site of Harts' Exchange Hotel, later the Lake House Hotel, which burned in 1868.
3		181 Battery Street	Shanty on the Shore, restaurant	Isaac Nye/J. Nye Paint Shop; Porter Manufacturing 1889; Wakefield Awnings; Champlain Transit Co.; Welcome Inn Restaurant	ca. 1900 Ref: NR Nom. Possibly ca. 1829 (Ref: Blow)	Possibly once part of a complex of structures; later stood alone starting between 1889 and 1894 (Sanborn Map).
6		212 Battery Street	Office/Retail Space	Vermont Fruit Company	ca. 1930 Ref. NR Nom.	Built between 1926 (Sanborn Map) & 1937 (Air Photo)
7		202 Battery Street	Office/Retail Space	Merchant's Bank Building; Wholesale Firms; Burlington Freezer Co.	ca. 1850 Ref: Blow & BFP ad for a builder 8 Mar 1850 ca. 1849 Ref: NR Nom.	Bank organized as Co. in 1849
8		198 Battery Street	Office/Retail Space	Commercial Block	ca. 1860 Ref: NR Nom.	Possibly on Presdee & Edwards Map, 1853
9		196 Battery Street	Art Gallery	"Musicant Building"	before 1853 Ref: NR Nom. ca. 1830+/- Ref: UVM HP Web Site Possibly 1848 Ref: BFP 1848	BFP 12 May 1848 says in 1848, there was a partial collapse during the construction of a three story brick building belonging to Amasa Drew "on Water Street opposite the Exchange Hotel"

RESOURCE NUMBER.	RESOURCE NUMBER	STREET ADDRESS	CURRENT / NAME / USE	HISTORIC NAME / USE	DATE BUILT	NOTES
18		189 South Champlain	Residence	Duplex	before 1885 Ref: NR Nom.	Possibly on 1869 Sanborn Map
19		183 South Champlain	Apartments	John K. Gray/Charles B. Gray's Carriage Works	ca. 1830 Ref. NR nom. ca. 1848 Ref.: UVM HP Web Site (land bought by Co. in 1848)	Child's 1882 (p. 106) says the shop on Champlain St. was established in 1830. Building clearly on Map 1853 Business sold all stock at auction and offered the real estate at private sale, BFP 9 Jan. 1885. Sanborn Maps confirm between 1882 - 1889 became apartments
20		39-41 King Street	Dwelling	Duplex; Red Lion Restaurant	ca. 1869-1877 Ref.: Sanborn Maps & Meilbek	
25		74-76 Maple Street	Handy's Lunch, restaurant	Store; Tenement/ Dwelling	ca. 1865 Ref.: NR Nom.	Store run by Horace W. Smith in 1869, Sanborn Map
26		202 South Champlain Street	Residence	Tenement/Dwelling	ca. 1862 - 1869 Ref.: Wainwright and Sanborn Maps	
27		194 South Champlain	Residence	Schoolhouse	ca. 1850 Ref. NR Nom.	Appears on Presdee & Edwards Map 1853 Labeled as School ,Wainwright 1862 and Sanborn & Beers 1869
28		188 South Champlain	Residence	Dwelling	ca. 1894 – 1900 Ref.: Sanborn Maps ca. 1885 Ref. NR nom.	There was another house pre-1853 behind it on side of old RR line
29		184 South Champlain	Residence	Dwelling	pre-1869 Ref.: Sanborn Map before 1887 Ref.: NR Nom.	On Sanborn Map 1869
30		182 South Champlain	Residence	Dwelling	before 1889 Ref.: NR Nom.	
31		43-45 King Street	Lake Champlain Maritime Museum	Captain White House; Chicken Bone Restaurant	ca. 1815 Ref: UVM CAP #315 before 1853 Ref.: NR Nom.	Ell to south removed recently and another structure built.
35		94-106 Maple Street	Apartments	Worker's Row Housing	1885 Ref.: Blow	Distinct Slate Roof, built by Loomis Smith

RESOURCE NUMBER.	RESOURCE NUMBER	STREET ADDRESS	CURRENT / NAME / USE	HISTORIC NAME / USE	DATE BUILT	NOTES
36		197-199 Pine Street	Residence	Duplex	1894 Ref.: Sanborn Maps	Sanborn 1894 notes the foundation had just been built
37		191 Pine Street	Residence	Dwelling	1877-1889 Ref.: Meilbek and Sanborn Maps	
38		189 Pine Street	Residence	Dwelling	1877-1889 Ref: Meilbek and Sanborn Maps ca. 1875 Ref. NR Nom.	
39		185 Pine Street	Residence	Dwelling	Possibly pre-1869 Ref.: Sanborn Maps	
40		73-75 King Street	Apartments	Dwelling	Possibly pre-1869 Ref.: Sanborn Maps	Site occupied by structure pre-1869 (Sanborn), but appears either to have stories added to it or a new building built on same footprint
75		71 King Street	Residence	Dwelling	ca. 1890-1894 Ref.: Hopkins and Sanborn Maps	
76		65-69 King Street	Commercial Block	Grocery; candy making business; tenements	ca. 1894-1900 Ref.: Sanborn Maps	
77		63 King Street	Town House	Residence	ca. 1890-1894 Ref.: Hopkins and Sanborn	
78		79 King Street	Residence	Dwelling	ca. 1860 Ref.: NR Nom.	Possibly on Presdee & Edwards 1853 Map
79		49-51 King Street	Apartment House	Duplex	ca. 1912-1919 Ref.: Sanborn Maps	
80		35 King Street	Currently vacant, for lease	Gideon King Jr House	ca. 1830-1850 Ref.: O'Neil 1798 Ref. NR Nom.	Earlier King house (ca. 1798), likely at different location; evidence suggests build date 1830-1850.
87		88 Maple Street	Residence	Dwelling	ca. 1853 Ref.: Presdee & Edward Map	Possibly pre 1853
88		84-86 Maple Street	Residence	Dwelling/Tenement	ca. 1853 Ref.: Presdee & Edward Map	Possibly pre 1853
89		80-82 Maple Street	Residence	Dwelling/Tenement	ca. 1869 Ref.: Beers, Sanborn	Possibly pre 1869

RESOURCE NUMBER.	RESOURCE NUMBER	STREET ADDRESS	CURRENT / NAME / USE	HISTORIC NAME / USE	DATE BUILT	NOTES
91		62 Maple Street	Residence	Boarding House	ca. 1870s Ref.: Blow	"despite its vague Greek Revival appearance, it was constructed in the 1870s" (Blow)
92		58-60 Maple Street	Residence	Duplex	ca. 1860s Ref: Beers	Sometime after 1853 (Presdee & Edwards)
93		52 Maple Street	Office Space (Halloway Block)	Burlington Coal and Ice; Architectural Salvage Co.	Ca. 1926 Ref.: Sanborn Map, Blow, 1937 Air Photo 1926-1942 Ref.: NR Nom.	Blow says structure was added to in 1942.
100		103 Maple Street	Residence	Dwelling	1885 Ref.: Sanborn Maps, BFP 1886	Charles R Hayward (VP Burl Manufacturing) House built on corner in 1885, BFP 8 Jan 1886
101		95 Maple Street	Residence	Dwelling	ca. 1880 Ref.: NR Nom.	
102		89 Maple Street	Residence	Dwelling	Between 1894-1900 Ref.: Sanborn Maps ca. 1905 Ref.: NR Nom.	
103		81 Maple Street	Residence	Tenement/Dwelling	ca. 1869 Ref.: Sanborn Map	
104		75 Maple Street	Advance Music Center	Arbuckle Block; National Paper Tube and Box Co (1915-1945)	1885 Ref.: BFP 1886, Sanborn 1885-1889	Built for Thomas Arbuckle Cigars / Candy Co. on his property. This structure replaced two structures one from between 1853 and 1862 and the other built 1871; BFP 8 Jan 1886
105		57 Maple Street	Wharf Lane Apartments	G.S. Blodgett Co. (Oven Co.); General Electric Armaments Plant	ca. 1926 Ref.: Sanborn 1919-1926; Burl City Directory 1926 & 1927	Architect Frank L. Austin
106		47 Maple Street	Terry Precision Cycling / Maglianero Cafe	Holbrook Grocery Co. Wholesale Grocers Warehouse (Keene, NH), later merged with Burlington Grocery Co.	1914-1916 Ref.: BFP 1914 and 1916	BFP 22 Jan 1914 says the property was purchased and plans to build in spring were being made. BFP 12 Oct 1916 describes the 'new warehouse" with its own side track to unload 4 cars at a time and enough space to store 400 cars inside.

RESOURCE NUMBER.	RESOURCE NUMBER	STREET ADDRESS	CURRENT / NAME / USE	HISTORIC NAME / USE	DATE BUILT	NOTES
107		214 Battery	Waterfront Dive Shop	Burlington Beef Co., Dressed Beef Wholesalers	1892 Ref.: BFP 21 July 1892, Sanborn Maps 1889-1894 ca. 1906 Ref. NR Nom.	Built as cold storage building. Earlier building in road; Hopkins Map 1890 still has the former building in road. Site formerly J. Saragon's tavern.
125 (Amended)		234 South Champlain	Bobbin Mill Condominiums	Vermont Spool and Bobbin Co.	1905 Ref.: NR Nomination Amendment, BFP 13 July 1905, Sanborn Maps 1900-1906	Two major additions east 1912-1919 and north 1919-1926. Cement blocks made on site, stone dust from "Phelps Ledge" for color, "only building of its kind in VT" when built, contractor EF Moore On Site of 1860s Burlington Manufacturing Co.
PINE STREET HISTORIC DISTRICT						
	2h	Lavalley Lane	Garage	Garage	1951	Only contributing resource at wastewater plant
	3	Lavalley Lane	Burlington Railyard	Rutland Railroad Yard	1849 Ref. NR Nom.	Many modifications since 1849
	3b	Lavalley Lane	Railroad Engine House	Railroad Engine House	1916-1918 Ref. NR Nom., BFP 26 July 1917	
	3c	Lavalley Lane	Turntable	Turntable	ca. 1940 Ref. NR Nom.	BFP 26 July 1917 notes foundation for the turntable for the new engine house (located north of drawbridge and west of main tracks) were laid with sand imported from Colchester, current structure upgraded ca. 1940
	3d	Lavalley Lane	Pumphouse / Boiler Room	Pumphouse / Boiler Room	ca. 1920 Ref. NR Nom.	
	10	241-243 South Champlain	Seven Days Newspaper, et.al	Champlain Valley Fruit Co.	1919 Ref. NR Nom.	Started in 1919; added onto in the 1930s, after.ca.1960, and in 1990s. Formerly early site of the Burlington Brewery & several residences
	11	266 South Champlain	Hopskoch Photography, Burlington Community Land Trust	National Biscuit Company (NABISCO)	1923 Ref. NR Nom.	
	15	221 Pine Street	Residence	Duplex	ca. 1895 Ref. NR Nom.	Sanborn Maps indicate built between 1894-1900

RESOURCE NUMBER.	RESOURCE NUMBER	STREET ADDRESS	CURRENT / NAME / USE	HISTORIC NAME / USE	DATE BUILT	NOTES
	21	257-277 Pine Street	Akido Center, New England Floor Covering Carpet & Tile, et al.	Goodell Granite & Marble Co., Bullocks Standard Steam Laundry	ca. 1919 Sanborn Maps ca. 1925 Ref. NR Nom.	Original building by Goodell Granite & Marble Co. 1912-1919; front (east) section of current building appears to date to 1919; back (west) section built between 1926-1938 (after it becomes Steam Laundry) (Sanborn Maps).
	28	339 Pine Street	Rebuild / Chittenden County Solid Waste District	Burlington Street Department	1934 Ref.: Burl. City Reports, McAllister Photos, NR Nom.	WPA project built 1934; additions in 1954 (north side on Pine Street), 1969 (western-most section), 1974 (north side, adjacent to 1954 addition)
	32	377 Pine Street	Architectural Stained Glass	Citizens Coal/Oil Company Office	1900 Ref. NR Nom.	
	32a	377 Pine Street	Storage	Wagon Shed	ca. 1906 Ref. NR Nom.	
	32b	377 Pine Street	Storage	Stable/Carriage Barn	ca. 1910 Ref. NR nom.	
	33	Water Feature	Pine Street Barge Canal Basin	The Basin	1868 Ref. NR Nom.	Contains submerged remains of five canal boats; environmental hazard site due to industrial toxic waste dumping
	34	Railroad Tracks	Railroad Drawbridge	Railroad Drawbridge	1919 Ref.: NR Nom., BFP 13 Nov 1919 & BFP 4 Dec 1919	Iron; Strauss Bascule Bridge Co., Chicago. Replaced earlier structures.

Archaeological Resources Assessment for the proposed Railyard Enterprise Project, Burlington, Chittenden County, Vermont

Submitted to:

Mark Smith, P.E.
Resource Systems Group, Inc.
55 Railroad Row
White River Junction, VT 05001

Submitted by:

Charles Knight, Ph.D.
University of Vermont
Consulting Archaeology Program
111 Delehanty Hall
180 Colchester Ave.
Burlington, VT 05405

Report No. 730

June 28 2013

Archaeological Resources Assessment for the proposed
Railyard Enterprise Project, Burlington, Chittenden County, Vermont

Project Description

The City of Burlington, with assistance from Resource Systems Group, Inc., proposes the Railyard Enterprise Project, Burlington, Chittenden County, Vermont (Figure 1). This Study builds on the Waterfront South (WFS) Access Project, completed in June of 2010. The key focus of the WFS Project was to develop alternatives for access and circulation to and within the study area with the central goal of promoting economic development. Alternatives developed to support this goal included an improved truck access to the Vermont Railway Railyard through Pine Street and a grid-street network to facilitate connectivity and local travel and foster development in the area. To meet these objectives, the WFS Project developed a total of 7 alternative street networks, combined with 6 street cross-sectional treatments. The study recommended 3 access/circulation alternatives each of which, when combined with complementary municipal and private infrastructure, could contribute significantly to the economic development of the study area in the future. The Railyard Enterprise Project alternatives will further emphasize the economic development opportunities in the study area and support Railyard operation enhancements. The Railyard Enterprise Project's study area is identical to the WFS area.

The University of Vermont Consulting Archaeology Program (UVM CAP) conducted an Archaeological Resources Assessment (ARA) of the APE for the proposed Railyard Enterprise project and identified several areas of historic period archaeological sensitivity. In addition, three previously identified historic period archaeological sties within the limits of the proposed project were identified as potentially significant and additional work recommended. Finally, a large area in the northeastern quadrant of the project parcel was identified as the most likely area to contain intact soils, and thus any precontact Native American sites. Portions of that area are archaeologically sensitive for precontact Native American sites. As a result, a Phase I site identification survey of newly identified historic period and precontact period sensitive areas, unless they can be avoided, and Phase II site evaluation studies for the three known sites are recommended as part of the Section 106 permitting process.

Study Goal

The goal of an ARA (or "review") is to identify portions of a specific project's APE that have the potential for containing precontact and/or historic sites. An ARA is to be accomplished through a "background search" and a "field inspection" of the project area. For this study, reference materials were reviewed following established guidelines. Resources examined included the National Register of Historic Places (NRHP) files; the Historic Sites and Structures Survey; and the USGS master archaeological maps that accompany the Vermont Archaeological Inventory (VAI). Relevant town histories and nineteenth-century maps also were consulted. Based on the background research, general contexts were derived for precontact and historic resources in the study area.

Archaeological Site Potential and Background Research

In 1996, an archaeological Phase IB survey was undertaken by the University of Maine at Farmington Archaeology Research Center (UMF ARC) to test along several alternatives of the proposed C-6 Alignment for the Southern Connector Project in Burlington, Vermont (Figure 2). Much of their proposed study occurred within the limits of the currently proposed Burlington Railyard Enterprise Project. One result of the 1996 study was the identification of five historic period archaeological sites within and adjacent to the Burlington Railyard. These were identified through detailed background research and a series of backhoe trenches that were excavated in order to investigate potential buried historic period sites (Figure 3). The layout of the UMF ARC Phase I testing is presented in Figure 3, and is show in relation to the southern-most alternative that they were testing. The five historic period sites identified during their study were listed in the Vermont Archaeological Inventory as VT-CH-732, VT-CH-733, VT-CH-734, VT-CH-735, and VT-CH-736.

Site VT-CH-732, the historic Gregory site, comprises a stone foundation which could represent a historic lumber or wagon shed associated with the Skillings, Whitney and Barnes Lumber Company that was in existence in that location in 1885 (Corey and Petersen 1998a). The UVM ARC recommended that a Phase II site evaluation of site VT-CH-732 be conducted to determine its significance.

Site VT-CH-733, the historic Post site, comprises the remnants of a wooden post (i.e. beam), which may represent a portion of a wooden shed associated with the lumber yard that was there in the late 19th century (Corey and Petersen 1998a). The UMF ARC did not recommend additional work at this site.

Site VT-CH-734, the historic Coal site, comprises the remnants of two circular concrete foundations, a concrete pad and a flat constructed stone surface (Corey and Petersen 1998a:60). A portion of these remains likely represent the remains of a former coal storage facility dating to the 1930s, while another portion dates to an earlier use of the area, likely in the mid-19th century (Corey and Petersen 1998b:60-62). The UMF ARC recommended that a Phase II site evaluation occur of this site before project construction begins.

Site VT-CH-735, the historic Lawn site, consists of the remains of a concrete foundation and associated electrical entrance box and metal pipes (Corey and Petersen 1998a:91). It is believed the remains recovered destroyed any remains of the earlier nineteenth century lumber industry. As a result, site VT-CH-735 is not archaeologically significant and the UMF ARC recommended no additional study.

Finally, site VT-CH-736, the historic Rail site, comprises the remains of the roundhouse used by the Rutland and Burlington, and Central Vermont railroads (Corey and Petersen 1998a:69). The remaining circular foundation representing the turntable portion of the

roundhouse is described as "remarkably preserved beneath the current railroad yard" (Corey and Petersen 1998a:69). The UMF ARC recommended that a Phase II site evaluation of site VT-CH-734 be conducted before project construction due to the highly preserved nature of the potentially significant remains that were uncovered.

As indicated in Figure 4, the land adjacent to the west side of Pine Street was originally the margins of a large wetland, which today has been largely in-filled and reconfigured into the Barge Canal. Although the construction of the Barge Canal severely impacted the integrity of the wetland, the margins of the Barge Canal may still contain intact soils (Figure 5). These locations would have been in strategic positions for accessing wetland waterfowl, fish and shellfish by precontact Native Americans, while being close to the shore of Lake Champlain. As a result, these soils, if intact, may contain precontact Native American sites. For instance, site VT-CH-81, or the Queen City Site is located along the lakeshore in front of the St. Johns Club and its neighboring properties along Central Avenue, southwest of the project area. The entire stretch of land along Pine Street may have contained numerous sites before being destroyed by residential and commercial development. The presence of the Queen City site to the southwest offers some insight into the attractiveness of the Burlington waterfront area to precontact Native American peoples. Considering the massive historic disturbances within the project area, the only other areas that may contain intact soils, and thus the potential for precontact Native American sites, are the lawns and yard associated with private residences and other buildings in the northeast quadrant of the project area. However, a much lower possibility exists that intact slivers of soil exist adjacent to the Barge Canal

Desk Review

As part of the desk review, the UVM CAP utilized the Vermont Division of Historic Preservation's (VDHP) predictive model for identifying precontact Native American archaeological sites. The Railyard Enterprise Project scores 42 on the Predictive Model, due to its location within 180 m of Lake Champlain (6), within 90 m of a wetland (12), within 90 m of a relict stream (12), and within 90 m of the confluence of this relict stream and Lake Champlain (12). In addition to the paper-based predictive model, the desk review uses a Geographical Information System (GIS) developed jointly by the UVM CAP, and its consultant Earth Analytic, Inc., which operationalizes the paper-based model. It does this by applying the VDHP's sensitivity criteria to all lands within the State of Vermont. In these maps, archaeological sensitivity is depicted by the presence of one or more overlapping factors, or types of archaeological sensitivity (i.e. proximity to water, etc.). The proposed Railyard Enterprise Project is located along an area that exhibits five overlapping sensitivity factors, which are Drainage, Waterbody, Wetland, Stream-water confluence, and Level Terrain (see Figure 1).

Field Inspection

A field inspection of the proposed project area was carried out on June 18, 2013 by Dr. Charles Knight, Assistant Director of the UVM CAP. Considering the extensive historic disturbances throughout the project area, the field inspection for precontact Native American sites

focused on areas that have had the least amount of historic development and most likelihood of intact soil, which are those areas in the northeast corner of the project area, and, to a lesser degree, adjacent to the Barge Canal. The residential area in the northeast quadrant of the project area was not inspected in any great detail, save it to say that if the proposed project alignment cuts through any residential or commercial lawns in that area, then additional archaeological work should be carried out. This the area under discussion, which has the highest likelihood of intact soils within the project area are the yard of the residences located between Pine and South Champlain Street, and between King Street in the north and 238 Pine Street in the south.

Regarding the potential for slivers of intact soils adjacent to the Barge Canal, since the exact limits of the in-filling of the pre-canal wetland is not known, subsurface testing will be necessary to determine the limits of fill and identify intact soils. The extreme western edge of the lot behind the Speaking Volumes/Myers Bagels building and lot, and along the western edge of the Greyhound Station lot were closely inspected. A few small grassy areas were identified along the margin of the Barge Canal and between these two properties (Figure 6), as well as immediately south of the City of Burlington building (Figure 7). However, soil cores taken in them indicated that they consist of fill. Considering the history of wetland in-filling and then development around the Barge Canal, and thus the existence of the original shoreline along the eastern margins of the Barge Canal, it is possible that portions of precontact Native American sites exists below a level of fill and asphalt in this zone.

Much of the proposed project area was researched for historic period sites previously by the UVF ARC as part of the Southern Connector project. The initial Phase IA identified areas of archaeological sensitivity for Euroamerican sites and provided detailed background research on the area (Corey and Petersen 1998b). The subsequent Phase IB report summarized the results of a series of backhoe trenches excavated at key locations throughout much of the central area of the project alignment (Corey and Petersen 1998a). One area that they identified as having the highest level of archaeological sensitivity was their Alternative #1, which was the southern-most alignment studied (see Figure 3). Alternative #1 passed by the northern end of the historic boat slip that extended north from the northeast corner of the Barge Canal, listed as the "Filled in Arm of Basin" in Figure 8. This historic boat slip was a focus of historic period activity associated with the lumber industry in Vermont. It is not depicted in the historic 1853 Presdee and Edwards map (Figure 9) nor the historic 1857 Wallings map (Figure 10), but is depicted on the 1869 Beers Atlas (Figure 11) and several subsequent maps (Figures 12 & 13). The historic slip was used to move lumber and other products from the railyard to the barges in the Barge Canal and along the banks of Lake Champlain. Not surprisingly then, the land immediately adjacent to the slip contained a series of lumber and coal sheds and office buildings dating to approximately 1885. Figure 14 depicts the 1885 Sanborn insurance map with the location of the historic sites identified by the UMF ARC (Corey and Petersen 1998a:38, Figure 29). Site VT-CH-732 is located immediately northeast of the end of the slip. Today, the in-filled boat slip comprises the line of trees immediately west of the Chittenden County Solid Waste lot and cuts through a section of the trailer storage lot south of this. Its exact terminus in the north is not known. Thus, the land

adjacent to the limits of the historic boat slip is sensitive for historic period sites (Figure 15). In addition, as pointed out by Corey and Petersen (1998b:52), the historic boat slip itself may contain the remains of sunken historic boats and barges that were buried when the slip was in-filled. Therefore, considering that numerous historic period buildings existed adjacent to the slip, the identification of site VT-CH-732 just northeast of the assumed northern edge of the slip, and that there is a potential for sunken water vessel remains to be encountered in the slip, this portion of the project area has a high level of historic period archaeological sensitivity. In sum, residential yards and lawns in the northeast quadrant of the project area are sensitive for precontact Native American sites, while three sites identified during previous archaeological work will require Phase II evaluations if they cannot be avoided, and the area adjacent to the north and northeast corner of the barge canal is sensitive for historic period sites.

Conclusions

The City of Burlington, with assistance from Resource Systems Group, Inc., proposes the Railyard Enterprise Project, Burlington, Chittenden County, Vermont. The UVM CAP conducted an Archaeological Resources Assessment of the proposed project area and identified several areas as sensitive for historic period archaeological sites. In addition, three historic period sites previously identified during an earlier road project in a portion of the currently proposed project area were identified as requiring additional Phase II archaeological study. Finally, the area in the northeast quadrant of the study area was identified as sensitive for precontact Native American site, provided the soil is intact. Therefore, the UVM CAP proposes several recommendations: 1) That a Phase I site identification, via backhoe trenching, occurs before project construction in several areas adjacent to the Barge Canal, with a focus on, and within, the historic boat slip (now filled) that extends north from the Barge Canal, unless that area can be avoided by the proposed project; 2) that Phase II site evaluations of known historic period sites VT-CH-732, VT-CH-734, and VT-CH-735 be conducted if they are to be impacted by the final project alignment, and 3) that additional archaeological study be conducted in the yards of private residences and commercial buildings residential yards located between Pine and South Champlain Street, and between King Street in the north and 238 Pine Street in the south if the final project alignment will disturb intact soils within that area. These recommendations are being made as part of the Section 106 permitting process.

Thank you for working with us on this project. Please let me know if you have any questions or comments.

Charles Knight, Ph.D.
Assistant Director

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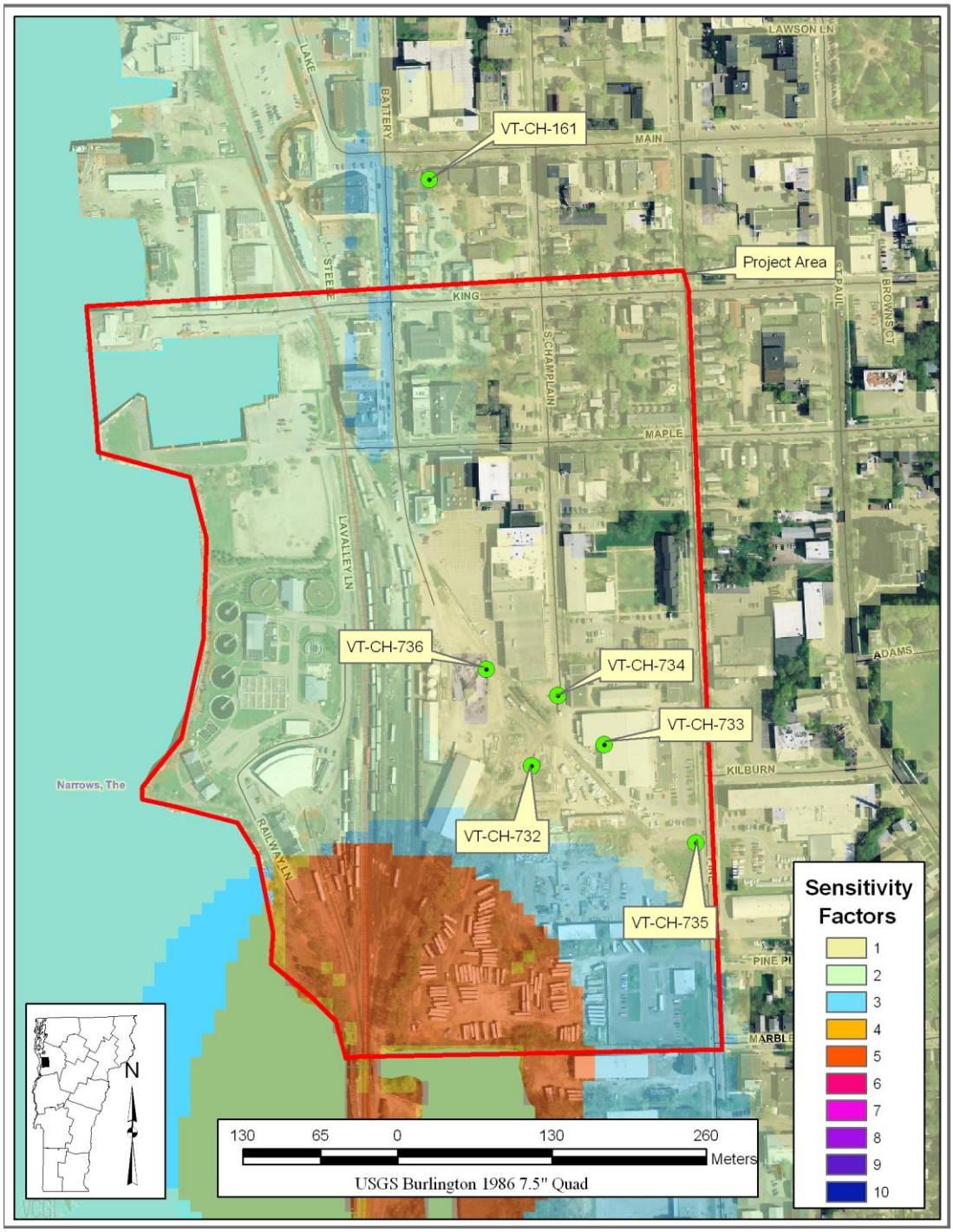

Figure 1. Map showing the location of the proposed Railyard Enterprise Project, in relation to archaeological sensitivity factors, Burlington, Chittenden County, Vermont.

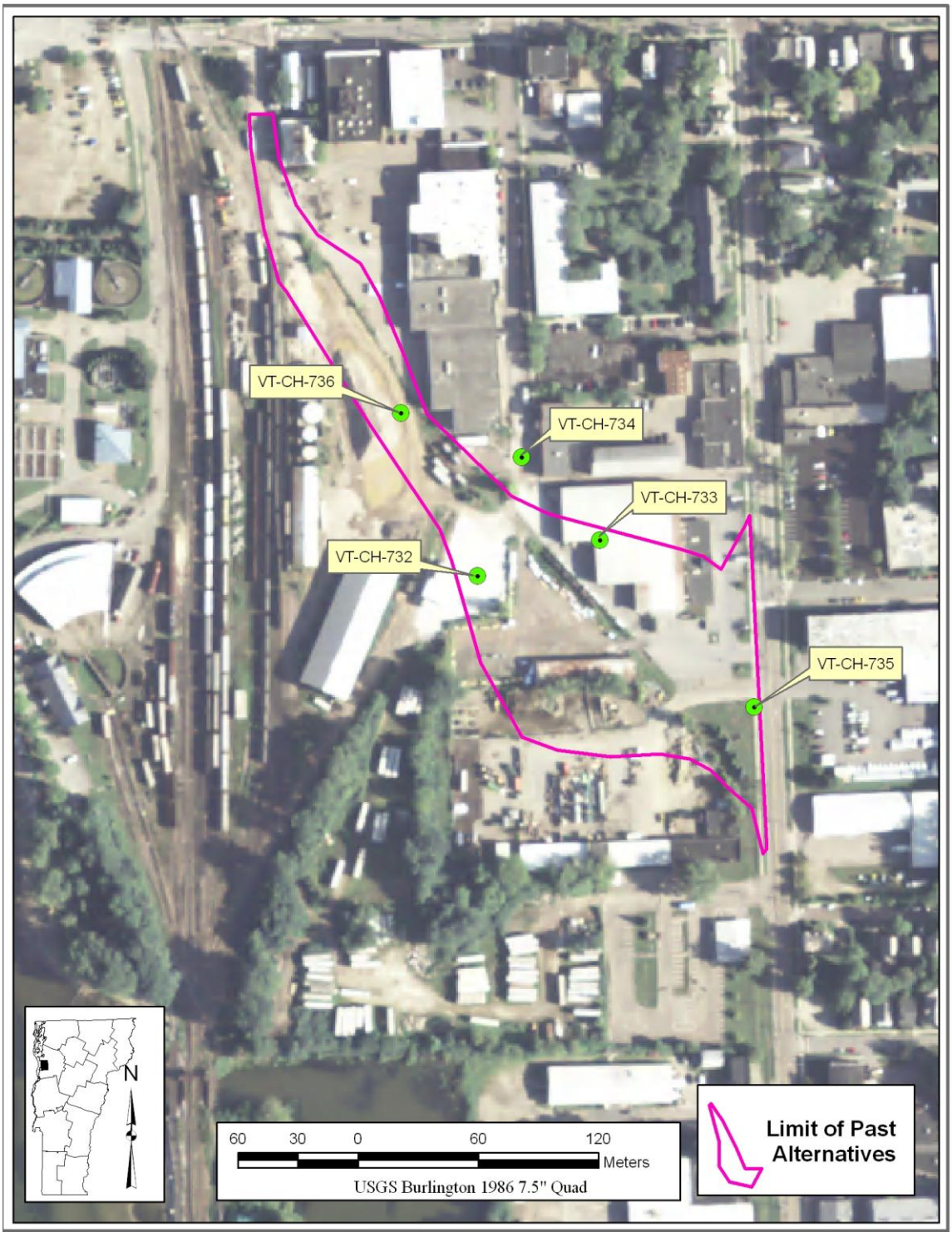

Figure 2. Map showing the location of five identified historic period sites and the limits of the alignments proposed for the C-6 Alignment, Southern Connector project in Burlington, Vermont.

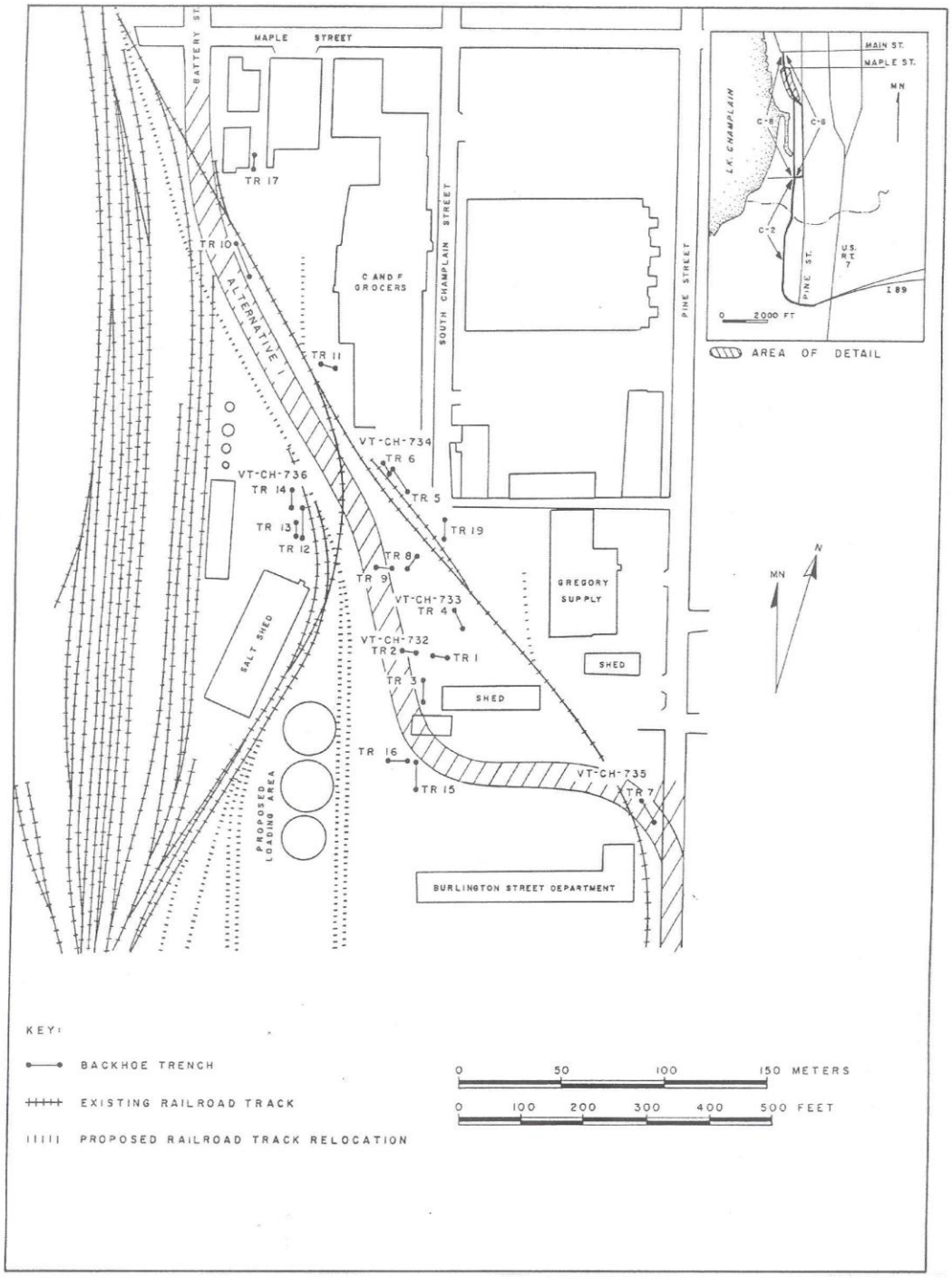

Figure 3. Map showing the location of the UMF ARC Phase IB backhoe trench testing in relation to the proposed Alignment #1 for the C-6 Alignment, Southern Connector project, Burlington, Vermont.

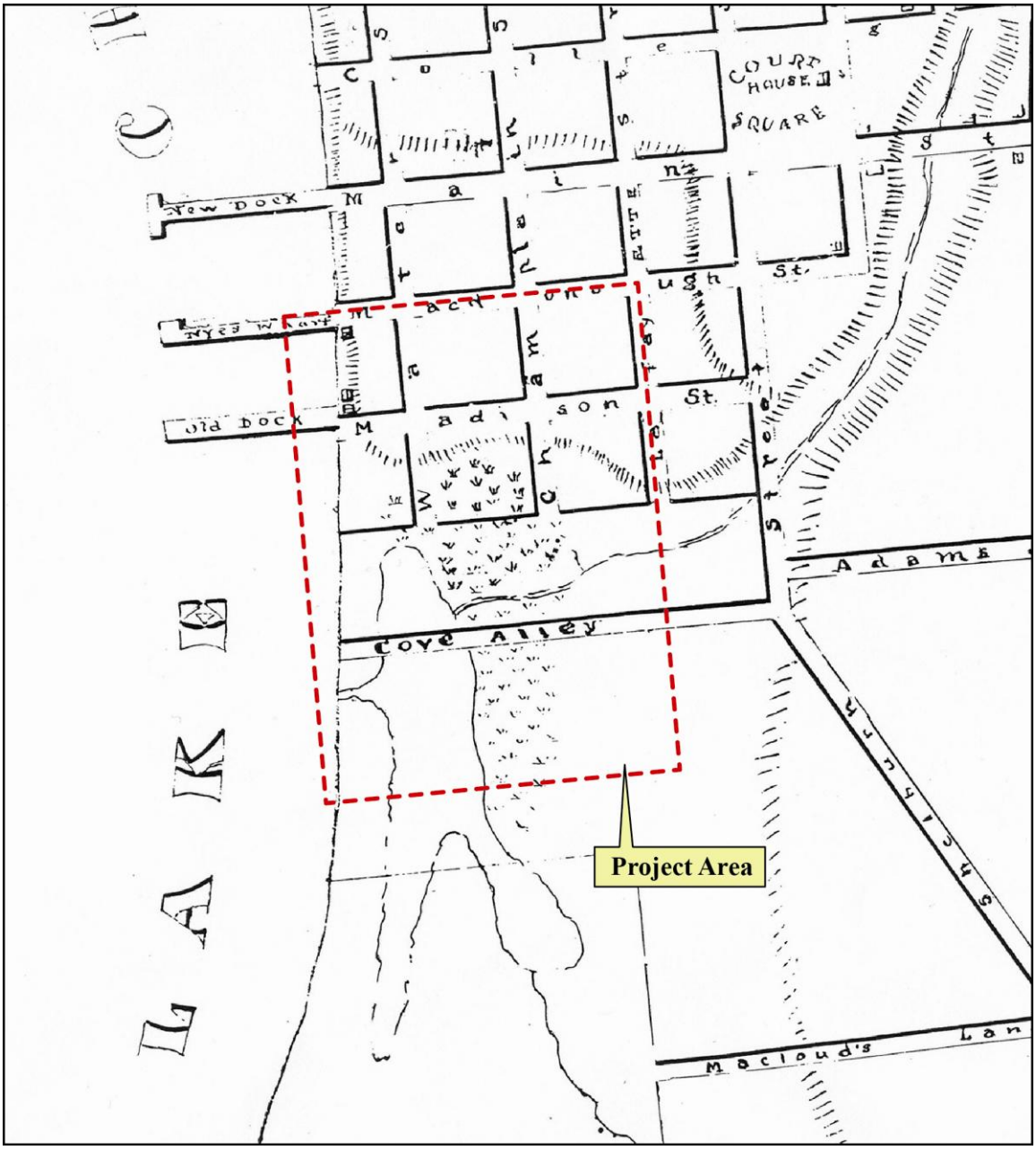

Figure 4. Historic 1833 Post map showing the downtown core of Burlington and the limits of the natural wetland that existed in much of the proposed project area.

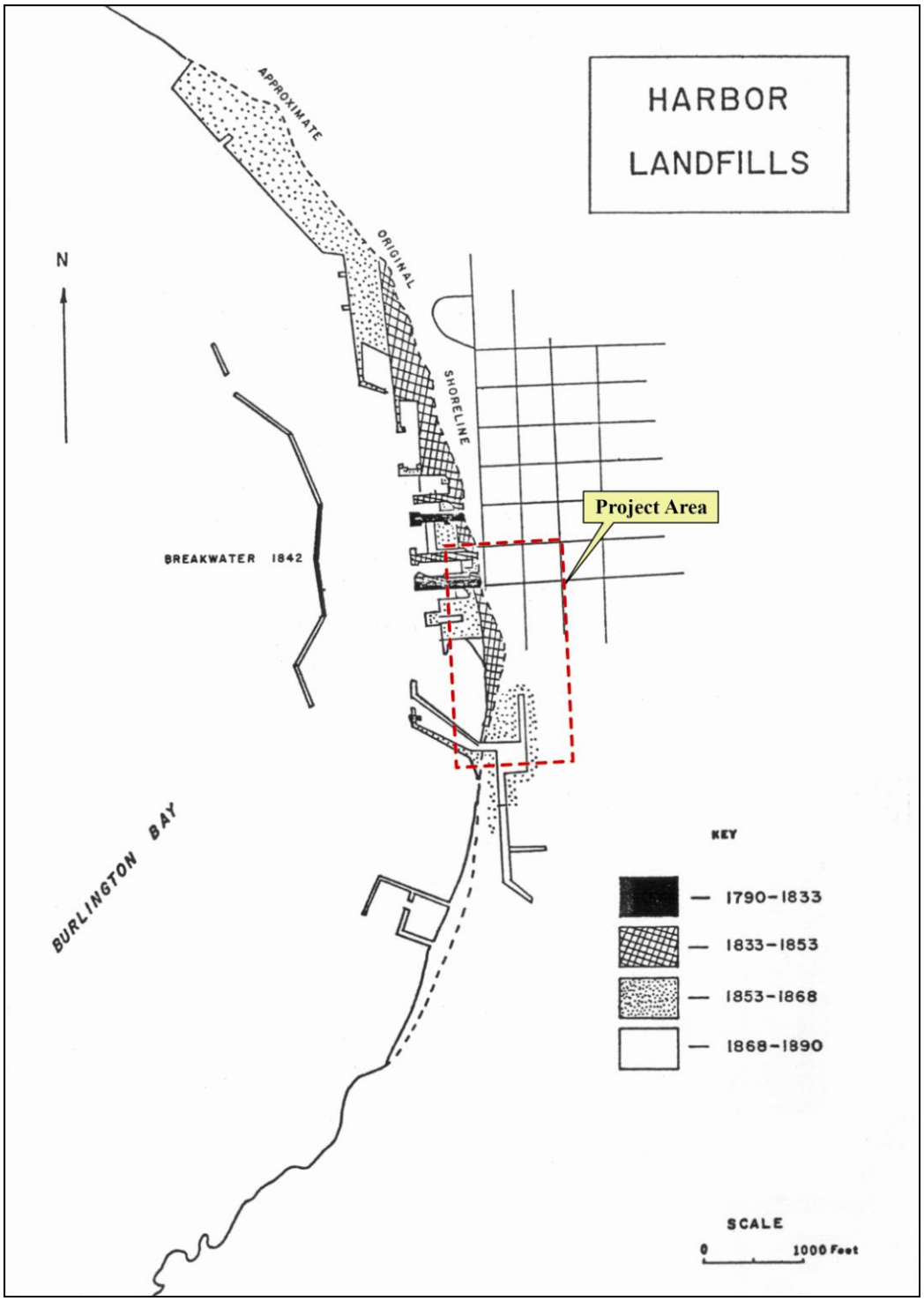

Figure 5. Map showing a reconstruction of the major filling episodes along the Burlington shoreline and of the large wetland to the south of the downtown core.

a

b

Figure 6. Photograph looking northwest (a) along the eastern edge of the Barge Canal, and north (b) at the northern edge of the lot behind the Speaking Volumes/Myers Bagels lot, Burlington, Vermont.

a

b

Figure 7. Photograph looking west (a) towards the in-filled slip, and north (b) at lawn area immediately south of the Burlington Street Department building the proposed Railyard Enterprise Project , Burlington, Vermont.

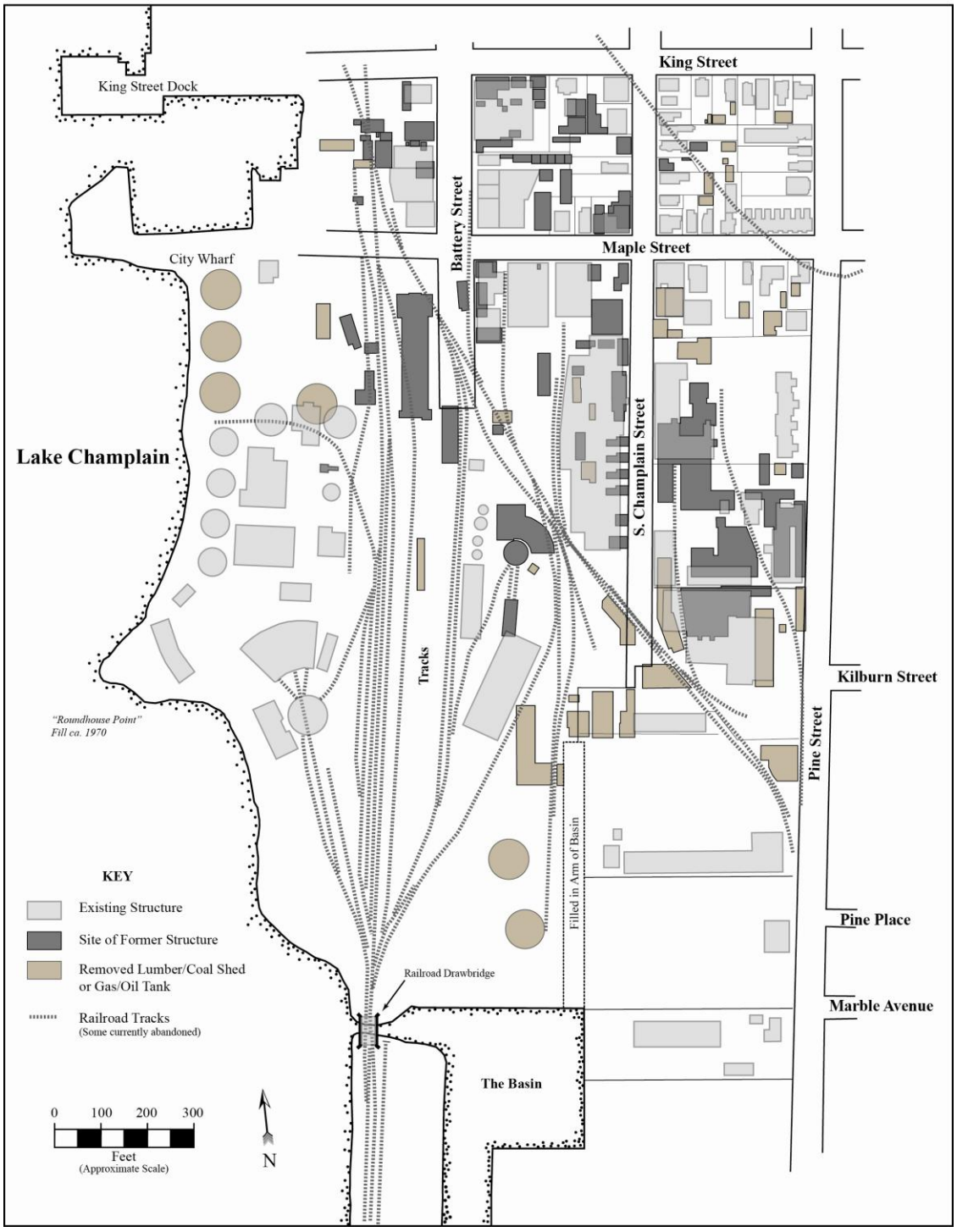

Figure 8. Map illustrating the location of existing and former structures within the limits of the proposed Railyard Enterprise Project, Burlington, Chittenden County, Vermont.

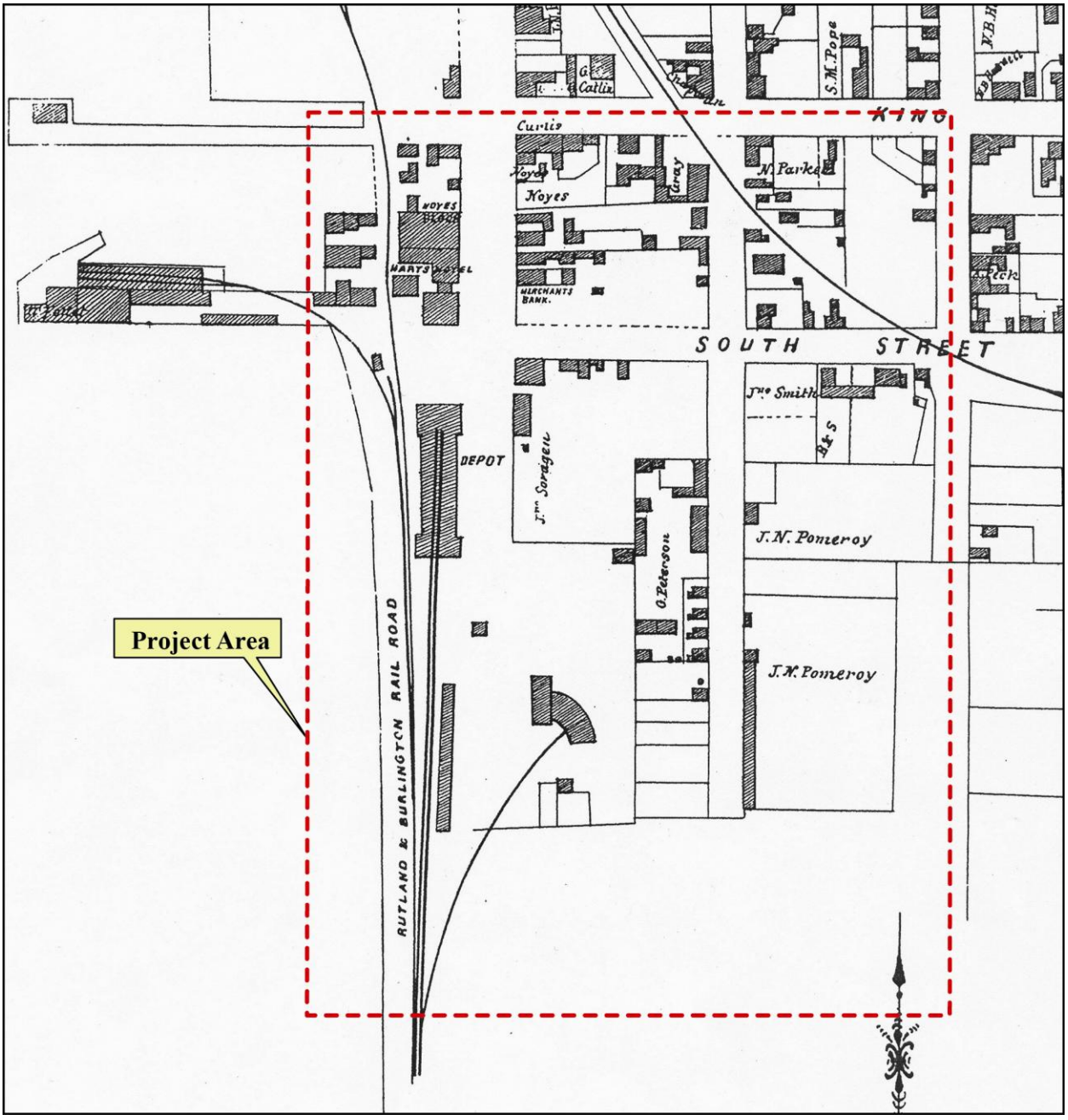

Figure 9. Historic 1853 Presdee and Edwards map showing the limits of the proposed Railyard Enterprise Project, Burlington, Chittenden County, Vermont.

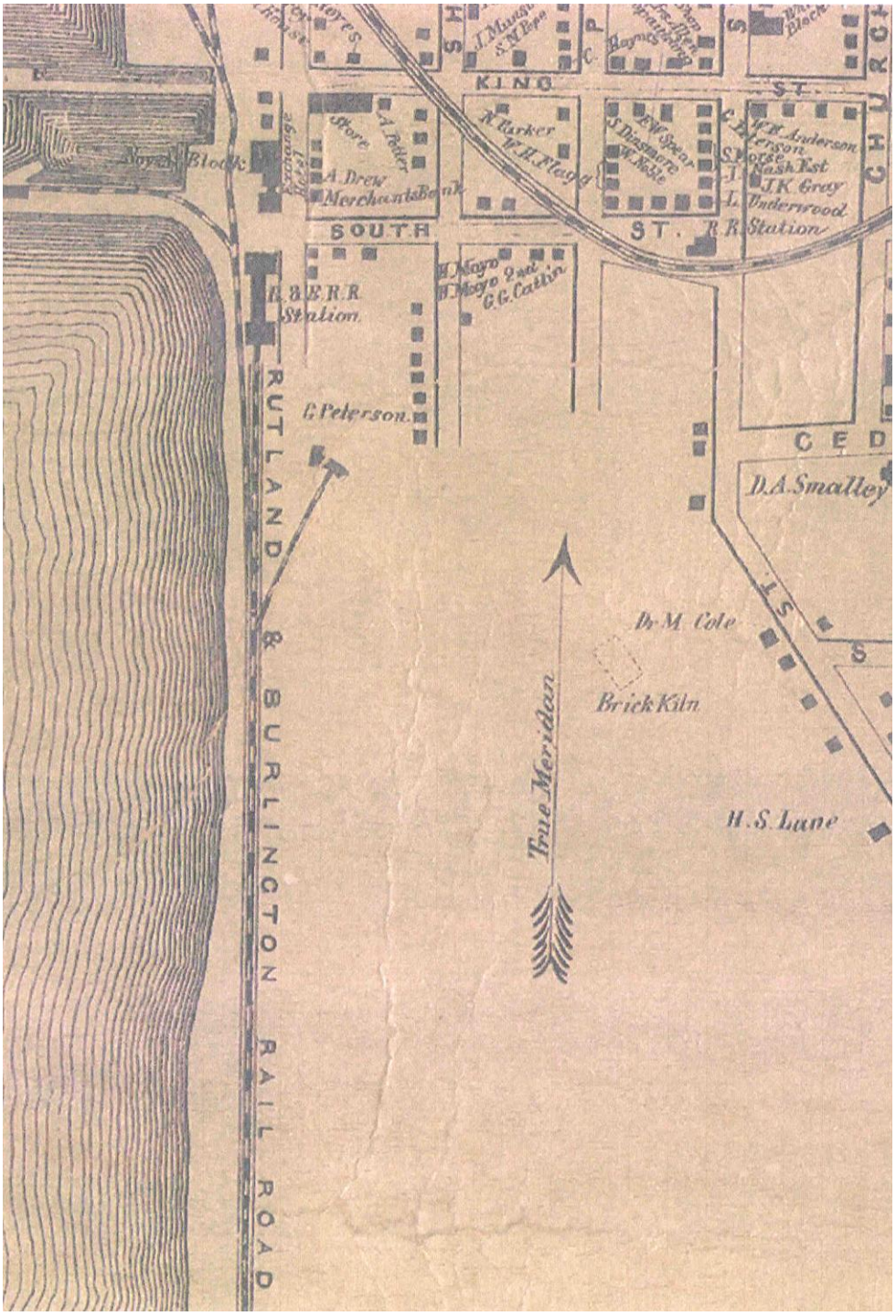

Figure 10. Historic 1857 Walling's map showing the location of the proposed Railyard Enterprise Project, Burlington, Chittenden County, Vermont

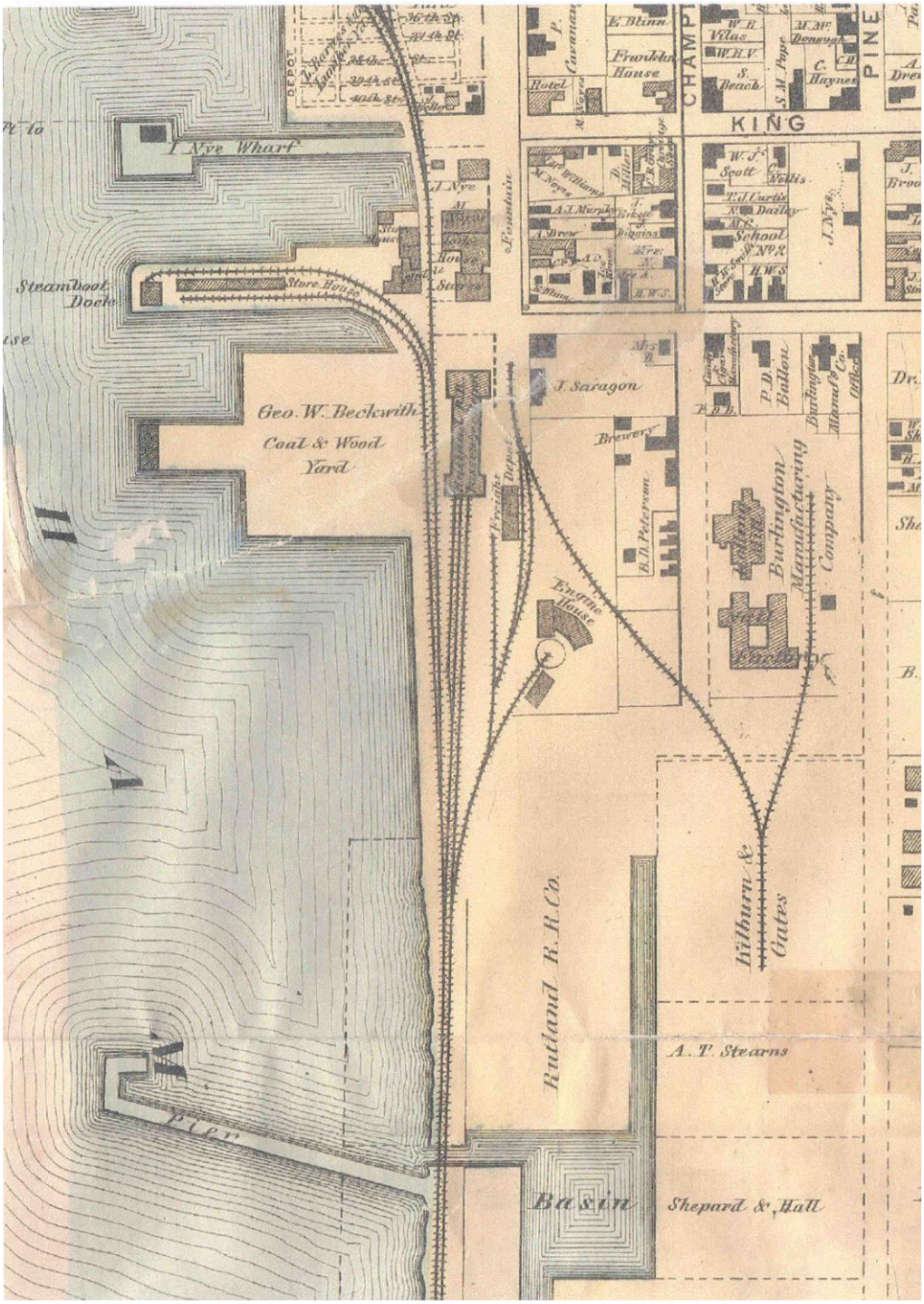

Figure 11. Historic 1869 Beers Atlas showing the location of the proposed Railyard Enterprise Project, Burlington, Chittenden County, Vermont

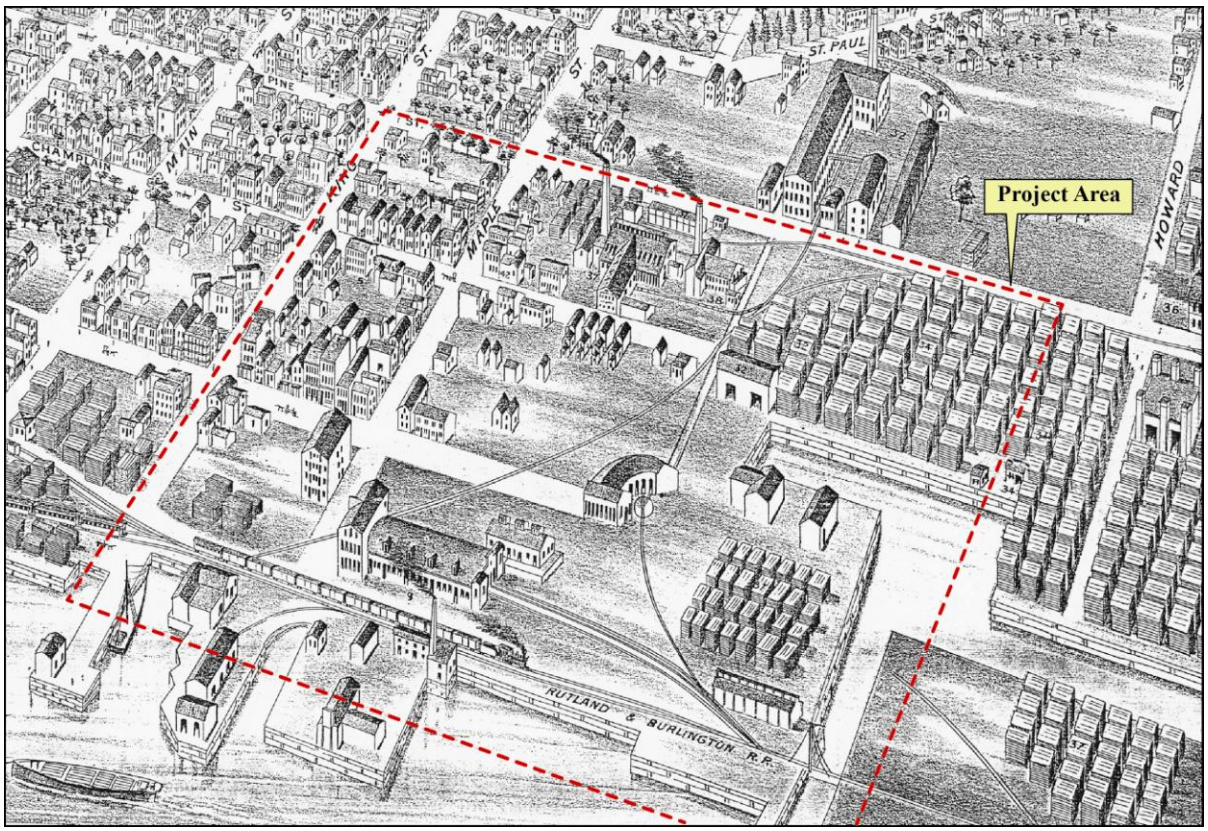

Figure 12. Historic 11877 Meibek Bird Eye View showing the limits of the proposed Railyard Enterprise Project, Burlington, Chittenden County, Vermont

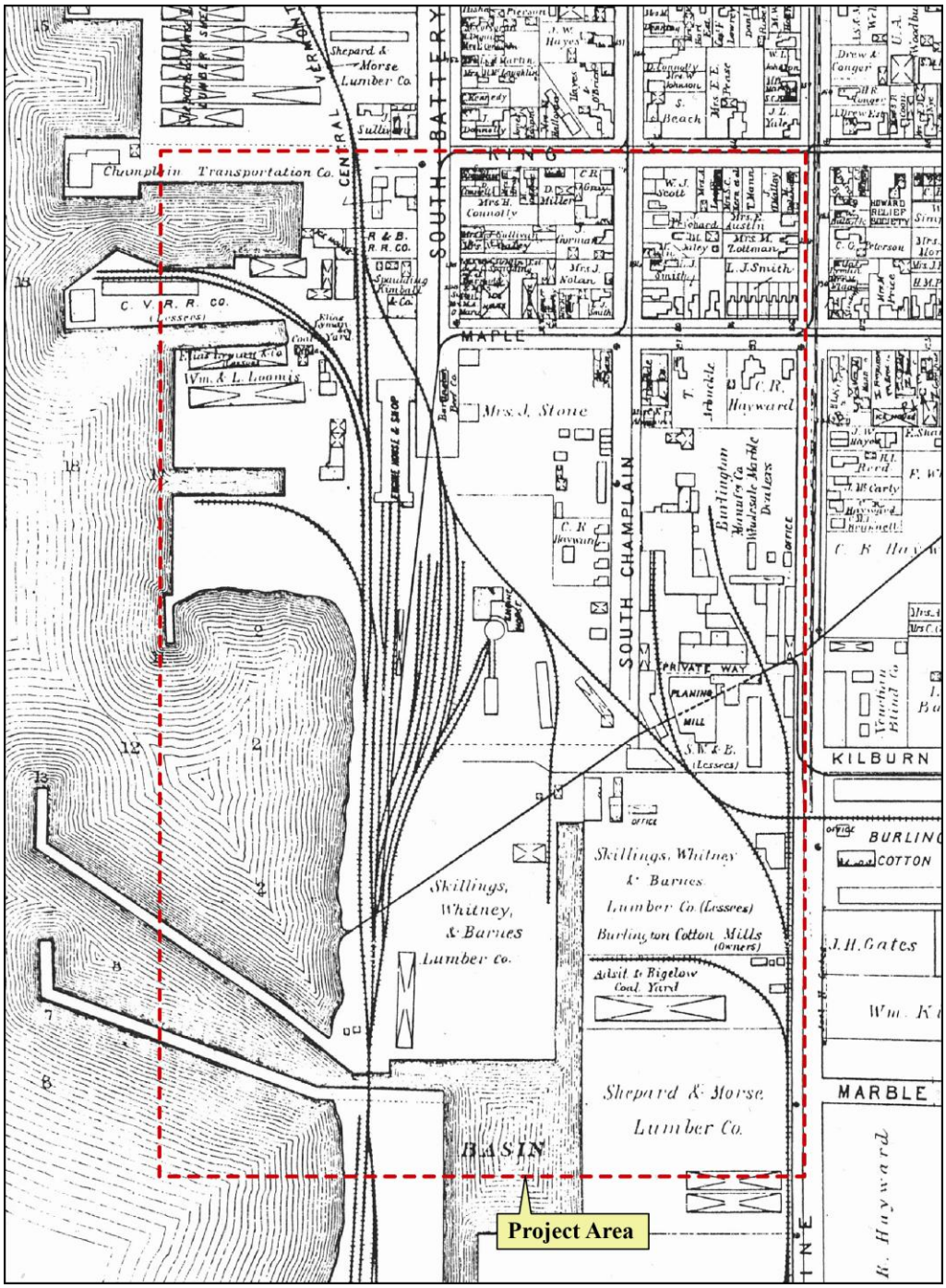

Figure 13. Historic 1890 Hopkins Map showing the limits of the proposed Railyard Enterprise Project, Burlington, Chittenden County, Vermont

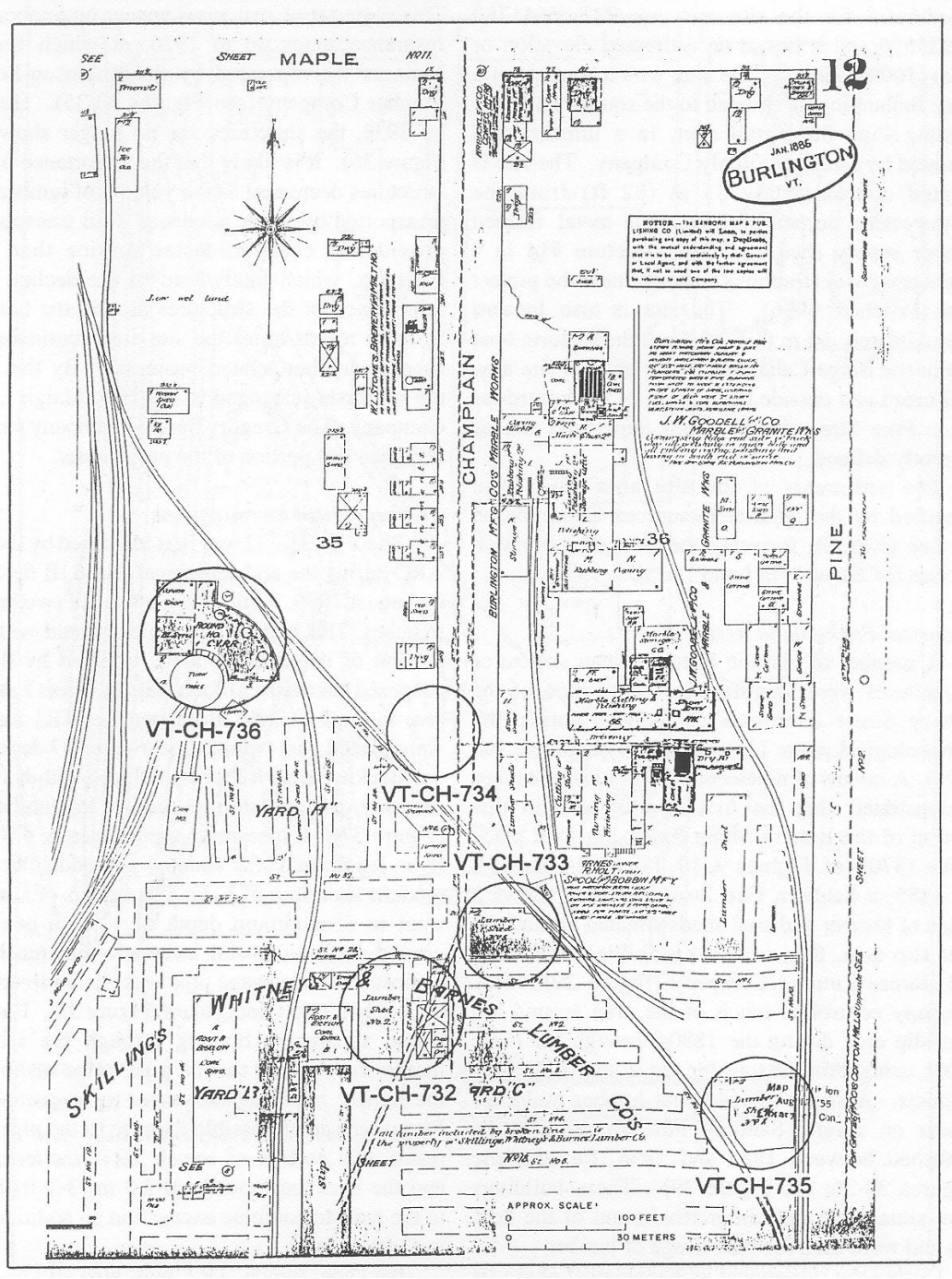

Figure 14. Sanborn Fire Insurance Map of 1885 showing the five identified historic period sites in relation to the general Railyard Enterprise Project, Burlington, Chittenden County, Vermont. Taken from Corey and Petersen (1998b: Figure 29).

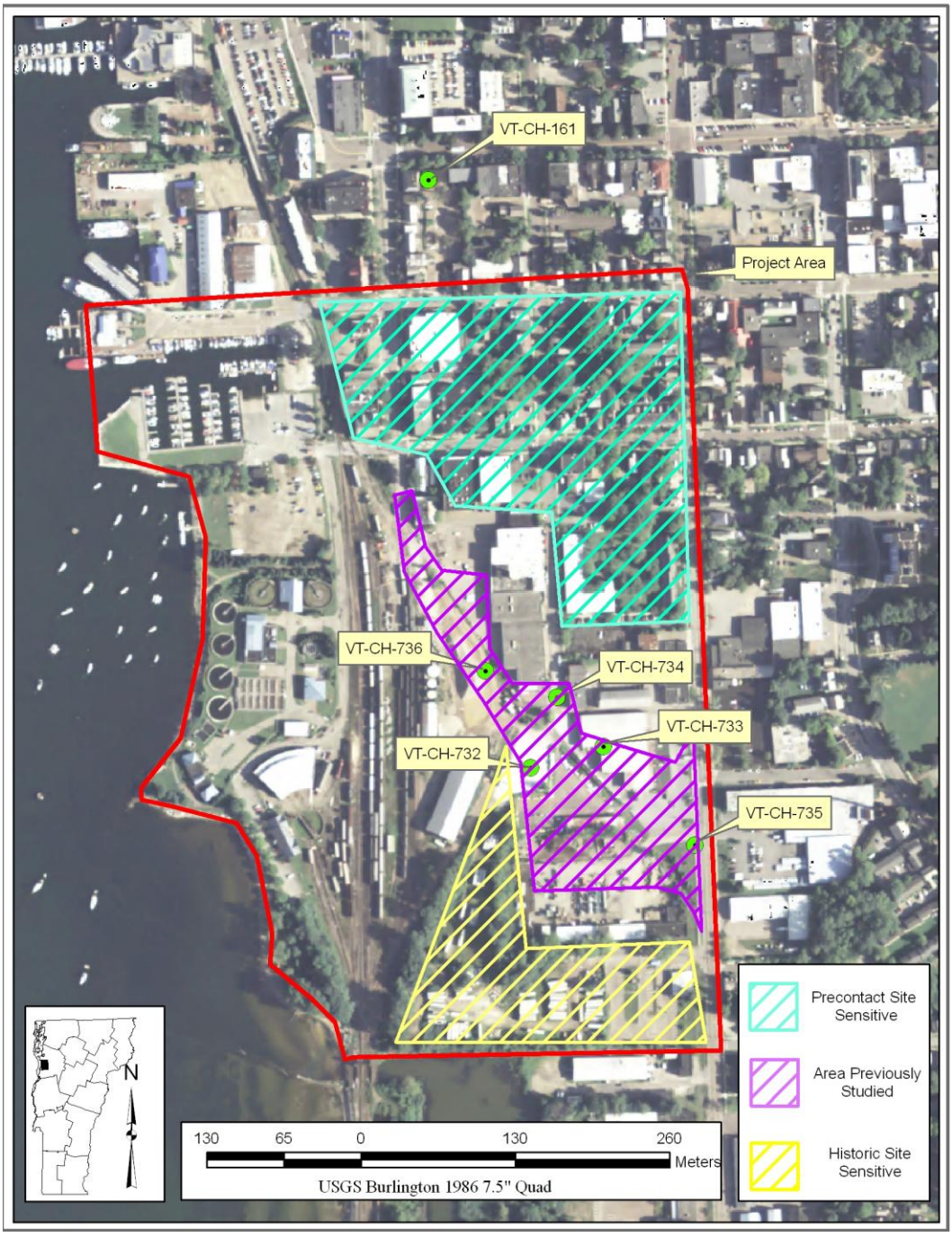

Figure 15. Map showing the areas of precontact Native American and Historic Euroamerican site sensitivity in relation to the area previously studied within the limits of the proposed Railyard Enterprise Project, Burlington, Chittenden County, Vermont