NPS Form 10-900
(Rev. 10-90)

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United States Department of the Interior
National Park Service

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NAT. REGISTER OF HISTORIC PLACES
NATIONAL PARK SERVICE

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Highland Spring Brewery Bottling and Storage Buildings

other names/site number Croft Brewery Bottling and Storage Building, Oliver Ditson & Company

2. Location

street & number 154-166 Terrace Street n/a not for publication

city or town Boston (Roxbury/Mission Hill) n/a vicinity

state Massachusetts code MA county Suffolk code 025 zip code 02120

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this ☒ nomination
☐ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property
☒ meets ☐ does not meet the National Register Criteria. I recommend that this property be considered significant
☐ nationally ☐ statewide ☒ locally. (☐ See continuation sheet for additional comments.)

Brona Simon — April 8, 2010

Signature of certifying official/Title — Brona Simon, SHPO — Date
Massachusetts Historical Commission

State or Federal agency and bureau

In my opinion, the property ☐ meets ☐ does not meet the National Register criteria. (☐ See continuation sheet for additional Comments.)

Signature of certifying official/Title — Date

State or Federal agency and bureau

4. National Park Service Certification

I, hereby certify that this property is:
☒ entered in the National Register
☐ See continuation sheet.
☐ determined eligible for the National Register
☐ See continuation sheet.
☐ determined not eligible for the National Register
☐ removed from the National Register
☐ other (explain): _____

for Edson H. Beall — Signature of the Keeper — Date of Action 5-28-10

5. Classification

Ownership of Property
(Check as many boxes as apply)

X private
_ public-local
_ public-State
_ public-Federal

(Check only one box)

X building(s)
_ district
_ site
_ structure
_ object

Number of Resources within Property
(Do not include previously listed resources in the count.)

Contributing	Noncontributing	
3	0	building
0	0	sites
0	0	structures
0	0	objects
3	0	Total

Name of related multiple property listing
(Enter "N/A" if property is not part of a multiple property listing.)

N/A

Number of contributing resources previously listed in the National Register

N/A

6. Function or Use

Historic Functions
(Enter categories from instructions)

INDUSTRY/industrial storage
INDUSTRY/manufacturing facility

Current Functions
(Enter categories from instructions)

VACANT/NOT IN USE

7. Description

Architectural Classification
(Enter categories from instructions)

LATE VICTORIAN/Romanesque Revival
LATE 19TH AND 20TH CENTURY REVIVALS/Georgian Revival

Materials
(Enter categories from instructions)

foundation STONE
walls BRICK
CONCRETE
roof SYNTHETICS/Rubber
other

Narrative Description
(Describe the historic and current condition of the property on one or more continuation sheets.)

See attached

NARRATIVE DESCRIPTION

The Highland Spring Brewery Bottling and Storage Buildings are located in the Mission Hill neighborhood of Boston. The buildings are adjacent to a Massachusetts Bay Transportation Authority and Amtrak railroad right-of-way on the east side of the site. The complex is surrounded by several parking lots and small buildings, including the Massachusetts Department of Conservation and Recreation's Southwest Corridor Park storage yard and modern office building to the south across New Heath Street, a paved surface parking lot owned by New England Baptist Hospital on the opposite side of Terrace Street to the west, and several three-story, wood-frame residences and vacant lots to the north.

1892 Highland Spring Brewery Bottling and Storage Building

Constructed in 1892 as a bottling and storage plant, the **1892 Highland Spring Brewery Bottling and Storage Building** at 164 Terrace Street, also known as the Croft Brewery Bottling and Storage Building, is a four-story Romanesque Revival-style, red-brick building. The west elevation (photo 1) exhibits pairs of tall, narrow, 4/4 windows in bays along Terrace Street. The windows and entryways are topped with brick jack-arch lintels and are set on granite sills. A strong base is created with a granite sill, above which are alternating bands of red and yellow brick, capped by two header courses of bricks alternating to create a dentil effect, topped by a stone cornice. There are two large arched loading bays, both raised substantially off the sidewalk at the level of the basement window heads. A bay along the basement and first floor levels of the northern end of the west elevation has been altered with the application of modern faux-stone cladding. Brick pilasters rise to the head of the fourth floor, with dentils and a barrel-vaulted cornice topping the west elevation.

The east elevation (photo 3) of the building exhibits predominately evenly spaced bays of windows on each floor level. Originally utilized as loading bays, two vertical bays on the east elevation were partially infilled with brick sills and double-hung windows. As the rear of the building, this elevation is devoid of ornament but does exhibit a decorative parapet. The north elevation contains only one arched-transom sash, but still exhibits evidence of multiple large and small window openings that have been infilled with brick. A heavily altered, one-story, brick garage building abuts the north elevation. The south elevation of the building abuts the 1912 Highland Spring Brewery Bottling and Storage Building (described below).

The interior (photo 4) of the building consists of five, large, open floor plates from the basement to the fourth floor. The interior features deteriorated wood floors, beams, columns, and decking. A brick wall running parallel to the north elevation separates the northwest corner stair, bathrooms, and storage area from the main floors of the building. The building features exposed brick walls and simple wood window stools. The building has been vacant for over 20 years, and the masonry shows signs of water infiltration on all elevations. Both the interior and exterior of the building have been heavily vandalized with graffiti. The building is currently in fair to poor condition as it has been vacant for over 20 years.

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1912 Highland Spring Brewery Bottling and Storage Building

The **1912 Highland Spring Brewery Bottling and Storage Building** (also known as the Oliver Ditson Building) at 166 Terrace Street is a five-story, Georgian Revival-style, steel reinforced, concrete industrial building. The massive five-story building offers an imposing presence at the corner of Terrace and New Heath Streets (photo 2). Typical of Georgian Revival-style buildings, this structure is highly symmetrical, with a modestly ornamented façade. The building continues the granite base and stone banding above the first floor of the adjacent pre-existing building, creating a strong horizontal alignment between the two buildings, despite their stylistic differences. The four-by-nine bay building is detailed with three-story (floors 2-4) brick pilasters with stone caps surmounted with a brick frieze on three elevations of the building incised with "1835 Oliver Ditson 1925." The building exhibits a stone dentil trimmed cornice at a low brick parapet including broad, centrally placed gables, revealing "OD CO" in the rondels. The building is further detailed with pairs of tall window openings in evenly spaced bays along the west (Terrace Street) elevation of floors 2-4 with each window framed with cast-stone lintels and sills. A strong base is created with a cast-stone band set above a tall brick base detailed with stacked window openings to illuminate the basement and first floor levels, with recessed brick panels in between.

The main pedestrian entrance (photo 6) to the building is located near the northern end of the west elevation beneath a pair of windows and adjacent to a large overhead garage door, that provides access to an internal loading dock. The primary pedestrian entrance is located at grade with a central doorway flanked by wood and glass panels on each side. Transom windows are located directly above the door, and two four-pane transom windows are located above the smaller transom windows. A secondary pedestrian egress doorway is located at the southernmost bay of the west elevation at the basement level. The vehicular entrance is located immediately to the north of the pedestrian entrance on the west elevation, and contains a large, metal overhead garage door that is presently inoperable.

The south and east elevations (photo 3) feature smaller-scaled window openings than the west elevation. Only one level of the north elevation is visible above the roof of the adjacent brick building. An overhead, inoperable, metal garage door is located at the east end of the basement level of the south elevation, situated below a large, concrete-block infilled opening. A wrought-iron fire escape is located above this bay on floors two through five, and is accessible by doorways that were created by lowering existing window sills.

The interior (photo 5) of the building consists of six large, open floor plates from the basement to the fifth floor. The interior features deteriorated steel reinforced concrete walls, concrete floors, beams, and decking. Each level is supported by steel-encased concrete columns, spaced at regular intervals. The interior is devoid of decoration and window casings on the basement through fourth floors consist of flat wood or aluminum trim. There are no windows on the fifth floor; however, several broken skylights and an access door to a fire escape on the south elevation shed some light into the space. The exterior walls of the elevator shaft and storage room along the fire wall between the two buildings is clad in painted terra-cotta fireproofing tiles. The building has been vacant for over 20 years, and the existing masonry shows signs of water infiltration on all elevations. Both the interior and exterior of the building have been heavily vandalized with graffiti.

The dilapidated, brick, one-story **garage (ca. 1945)** at 154 Terrace Street contains six large overhead door openings flanked by narrower bays containing rectangular window openings (infilled with plywood), and one pedestrian entrance on the Terrace Street elevation. All of the original overhead doors have been replaced and all extant window panes are significantly deteriorated or missing. Constructed immediately adjacent to the 1892 bottling building, the garage obscures the former window openings on the north elevation. The north elevation of the garage features a number of former window openings in a variety of sizes that have been infilled with plywood and masonry. The rear elevation consists of a solid painted brick wall with one window opening. The roof of the building, which has failed, is surrounded with chain-link fencing and razor wire.

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Highland Spring Brewery Bottling and Storage Buildings
Name of Property

Suffolk, MA
County and State

8. Statement of Significance

Applicable National Register Criteria
(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

X **A** Property is associated with events that have made a significant contribution to the broad patterns of our history.

__ **B** Property is associated with the lives of persons significant in our past.

X **C** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.

__ **D** Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations
(Mark "x" in all the boxes that apply.)

Property is:

_ **A** owned by religious institution or used for religious purposes.

_ **B** removed from its original location.

_ **C** a birthplace or grave.

_ **D** a cemetery.

_ **E** a reconstructed building, object, or structure.

_ **F** a commemorative property.

_ **G** less than 50 years of age or achieved significance within the past 50 years.

Narrative Statement of Significance
(Explain the significance of the property on one or more continuation sheets.)

Areas of Significance
(Enter categories from instructions)

INDUSTRY

ARCHITECTURE

Period of Significance

1892-1960

Significant Dates

1892, 1912

Significant Person
(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

Architect/Builder

J. William Beal

Monks and Johnson

9. Major Bibliographical References

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS): HPCA# 21,805

- _ preliminary determination of individual listing (36 CFR 67) has been requested
- _ previously listed in the National Register
- _ previously determined eligible by the National Register
- _ designated a National Historic Landmark
- _ recorded by Historic American Buildings Survey #_____
- _ recorded by Historic American Engineering Record #_____

Primary location of additional data:

- X State Historic Preservation Office
- _ Other State agency
- _ Federal agency
- _ Local government
- _ University
- _ Other

Name of repository:

STATEMENT OF SIGNIFICANCE

The former Highland Spring Brewery Bottling and Storage Buildings at 154-166 Terrace Street is a functionally related complex of buildings, significant under Criterion A for their association with the brewing, publishing, and manufacturing history of Boston, and under Criterion C as a collection of preserved historic commercial and storehouse buildings. The buildings retain their integrity of location, design, setting, materials, feeling, association, and workmanship. Significant for their association with the industrial development of the Roxbury and Mission Hill neighborhoods of Boston, the buildings were originally constructed as part of a larger Highland Spring Brewery complex located to the west of Terrace Street, and later utilized by the Croft Brewery and the Oliver Ditson Company.

The complex represents the changing industrial character of the Mission Hill area, having been adaptively reused from a brewery to a publishing house and pickle factory. Although some industry was located in this area of Boston in the 17th and 18th centuries, significant development began in the 19th century along Stony Brook with the expansion of the railroad through Roxbury Crossing. The breweries that dominated the area during this period closed following the passage of Prohibition, and new industries took advantage of the large, open floor plate buildings vacated in 1920. The industrial design, fireproof construction (the wood post-and-beam and steel-reinforced concrete buildings), and adaptability of the large open floor plates is a testament to the complex's ability to support the changing industries in this area of Boston.

Development of Mission Hill

Established by Puritan settlers in 1630, Roxbury was at the mainland end of Boston Neck, the only land route (running along present-day Washington Street) to the Shawmut peninsula. With its relatively hilly topography, Roxbury features two prominent hills, Roxbury Hill (now Boston Highlands / Highland Park) and Parker Hill (now Mission Hill), with impressive vistas of the city of Boston. The organization and initial settlement of Roxbury was shaped by three major factors: the hilly terrain, the existence of three key water waterways running through the town (the Muddy River, Stony Brook, and Smelt Brook), and the presence of previously established Native American trails meandering through the town and traversing the hills. The first road from Roxbury to Brookline ran along present-day Tremont Street and Huntington Avenue, and the road from Roxbury to Dedham traversed Parker Hill along present-day Parker and Heath Streets.

Bostonians constructed country estates in Roxbury throughout the 1600s and 1700s. In the early decades of the 17th century, Roxbury flourished around its town center at Eliot Square, which recorded 120 residences built within the vicinity of the town center by the 1650s. By the 17th and 18th centuries, the town saw a number of distinct neighborhoods arising. Villages emerged in Jamaica Plain, West Roxbury, Roxbury Village, Roxbury Crossing, and along Parker Hill. During this early period of growth, Roxbury was a community concentrated around its agriculture, with large country estates and farms dotting the undulating landscape. Much of the area within Roxbury, and especially within the neighborhood surrounding Parker Hill, was divided into large residential and agricultural estates owned by the Boston elite. One of the most prominent land owners in the neighborhood was John Parker, a wealthy local merchant from Boston and namesake of Parker Hill. Parker's estate was located at the summit of Parker Hill and consisted of an

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extensive property. Other prominent estates in the neighborhood included the Heath Homestead, the estate of Judge John A. Lowell, and the Withington Estate. Although it enjoyed nearly two centuries as a picturesque rural landscape, Roxbury would later, almost simultaneously with the onset of the American Revolution, begin its transition from a community dedicated to agricultural and residential pursuits to a town shifting its efforts toward industry and commerce.

The 17th and 18th centuries in Roxbury saw the establishment and operation of a number of industrial ventures, including 18 tanneries and slaughterhouses, a chocolate mill, and two grist mills. By the early 19th century, the town had attained great importance as one of the country's most prominent epicenters for the tanning industry. Roxbury owed this rapid development in industry during the earliest decades of the 19th century to two major factors: the completion of the mill dam over the Back Bay in the 1820s, thus encouraging many industries to relocate to Roxbury, and the ability to harness the fresh water supplied by the three waterways that ran through the town for power.

The difficult terrain around Parker Hill was developed only after the more easily assessable locations in Roxbury were settled including Roxbury Village and Roxbury Crossing. In the first several decades of the 19th century, Roxbury encountered a number of surges in industrial development. One of the major factors in this era of development can be attributed to major advancements in transportation between Boston and its surrounding towns, including Roxbury. First, hourly horse drawn coaches were initiated in the mid-1820s to serve as a direct line between the two communities. By the 1830s, horse drawn omnibuses transported Roxbury residents to Boston every 15 minutes. Construction on the Boston and Providence Railroad created a convenient means to travel in and out of the city, especially with the construction of the Roxbury Crossing station, which was operable as early as 1845. These significant developments and innovations in the transportation industry led Roxbury's complete transformation from a quiet country town to a booming metropolitan suburb.

In 1846, Roxbury became an independent city, with its population doubling in the 1840s. Continued rapid population growth resulted in the separation of West Roxbury, Roslindale, and Jamaica Plain from Roxbury in 1851. Roxbury itself was annexed by the City of Boston in 1867. At that time, Roxbury served not only as a residential area for those commuting to Boston but also boasted its own mills, factories, and breweries.

During the 1840s and 1850s, the Parker Hill area saw a boom in residential construction and infrastructure. Roads were cut and houses of various sizes and styles began dotting the hillside. In 1878, the Mission Church, constructed mainly to serve the growing German population, was completed, and dominated the developing skyline of the Parker Hill neighborhood. It was during this period that breweries began opening at a blistering pace in Roxbury and the surrounding communities of Jamaica Plain and West Roxbury, with the majority of the breweries established along the Stony Brook springing up during the 1860s and 1870s.

Following annexation by Boston, Roxbury's population continued to swell, resulting in the conversion of farms and estates to streets and denser housing. Immigrants from Ireland and Germany settled in Mission Hill and the Stony Brook Valley and found jobs in local factories and breweries. Breweries were established in Roxbury due to abundant clear spring water from the Stony Brook Aquifer. The area's affordable real estate also made it possible for new breweries to

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purchase substantial parcels of property after the annexation of Roxbury to Boston. The water, land, and rise of popularity in lagers combined to spur the local brewery industry. Boston had a total of 31 breweries operating in the city at its peak of production, making it the city with the highest per capita number of breweries in the United States. In Roxbury and Jamaica Plain alone, 24 breweries were located along Columbus Avenue, Heath Street, and Amory Street within approximately 1.5 miles of one another in the early 1900s.

Prohibition in 1920 lead to the demise of many breweries in Roxbury. Many of the buildings were demolished, but some remain. In addition to the Highland Spring Brewery buildings, other extant brewery buildings include the Eblana Brewery (1886) at 123-125 Heath Street and the American Brewing Company (1891-1892) at 249A Heath Street, both in the Queen Anne style, and the Renaissance Revival-style Roxbury Brewing Company (1896) at 31 Heath Street. In 1933, a few of the breweries reopened but could not compete with the large national breweries primarily located in the Midwest. Brewery buildings that still remain have been idle, some since Prohibition, and are in poor condition.

The Production of Beer in the 19th Century

Rise of the Lager

English-style ales, which are dark, heavy, brown, and thick, have been brewed in America since Colonial days but were never as popular as cider or spirits; however, in the early 19th century, production of ales increased as the limited brewing technology for ales were well-suited for the resources available to breweries in this country. Specifically, during the fermentation process, yeast in ales sat on the surface of the brewing beer and were fermented at room temperature. The ales required a short aging phase in casks, and later in a bottle (once bottling was popularized), and were ready to consume within a few days. Since these ales could turn sour quickly, they were generally consumed in and around the community in which they were brewed.

Although early beer production focused on ales, Americans also began to enjoy lagers in the mid-19th century. In contrast to ales, lagers are lighter in body and color and have lower alcohol content. Unlike ales, the yeast of lagers sank to the bottom of the brewing vat, and had to rest in storage at near-freezing temperatures for approximately three months. As the lager rested, the yeast and other sediments drifted to the bottom of the vat as it mellowed and flavors ripened, allowing the lager to retain its flavor with few opportunities for souring. However, the lager could begin to decay after removal from near-freezing storage areas, introducing the need to store beer prior to sale in underground cellars to maintain cool temperatures. The need to keep lagers cool during aging and during shipment to customers limited the reach of the lager market to within a mile or two of the brewery. The demand for lagers increased with an influx of German immigrants, who were the primary customers of lager beer, so most lager breweries were situated within a short distance of German communities in the early to mid 19th century. The number of German immigrants exploded in the 1840s as social upheaval in Germany brought more immigrants to America.

It was not a difference in process or taste that led to the increased demand for lager across ethnic lines, but instead the failed early prohibition efforts of individual states and territories in the mid 19th century that damned the ale and praised the lager. The temperance movement of the early 19th century limited production and consumption of alcohol in the United States. Several states and two territories succeeded in passing prohibition laws banning sale, manufacture, and consumption of alcohol.

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Violence beset some of these locales challenging the prohibition. The infamous Lager Beer Riot in Chicago erupted in the 1850s after police shuttered foreign-owned beer gardens, while tacitly allowing "American" drinking establishments to remain open. The riot occurred at the courthouse during the trial of 600 men and boys, mostly Germans, accused of violating the prohibition law, leaving one man dead, and many injured and arrested. Violence continued in other American cities: Cincinnati, Louisville, Portland, ME, and Milwaukee. As issues of slavery and immigration plagued the nation in the late 1850s, the temperance movement lost steam. However, the temporary ban in some locations had long-lasting repercussions for the brewing industry. Americans sought a middle ground and found comfort in the German approach to social drinking that treaded between the extremes of prohibition and intoxication. As America embraced the German model of beer gardens as temperate social drinking locations, they also embraced German lagers.

The new found popularity of lager led to the growth of breweries nationwide. The number of breweries skyrocketed in the 1850s; 431 brewers produced 750,000 barrels in 1850. The number of breweries climbed to 1,269 with an annual production of over a million barrels ten years later. By 1870, annual production rose to 6.6 million barrels.

Brewing Process

Brewing begins with soaking barley in water until it germinates. During this process, called malting, the barley's enzymes convert the complex starches within the barley into simple sugar maltose, simply known as "malt." The malt is then heated and dried to halt further germination of the barley. In the mid-1800s, brewers developed a method of drying malt in large rotating heated drums that left grain light in color, producing a pale, golden beer. The dry malt is then processed to remove the outer coating of the grain. After the malt is cracked, it is placed in a mash turn where it is combined with water. This leads to mashing, which is the further breakdown of complex sugars in the grain to create a sweet liquid called wort. The wort is then ready for brewing. Originally, wort was heated by open fire in kettles. Steam power contributed efficiency and uniformity to the brewing process, and became a significant component of commercial breweries in the 1850s. Prior to steaming, limited distribution opportunities made steam operations a poor investment. Once steam was introduced to breweries, it was used to boil the wort. Steam was run through pipes under the kettles, providing a more reliable and economical form of heat. It is transferred to a brew kettle and boiled to kill bacteria. Hops are added at this stage to balance the sweet flavor of the wort. Other grains such as corn or rice can be added as well to impact the beer's flavor. These added grains and the amount of hops will determine the type and flavor of the beer. The wort is then cooled, strained, and transferred to a vessel for fermentation. Yeast is added to consume sugars and the resulting product is beer. The type of yeast added and the length of fermentation will determine the beer produced. The beer is then transferred to another container that is air tight. Additional fermentation occurs resulting in carbonation. The beer is then aged for a particular time depending on the type of beer being produced. As described above, ales are aged for only a few days and at room temperature, while lagers are aged for several months at cool temperatures. After aging, beer may be filtered to eliminate the cloudy appearance caused by yeast and other particles remaining in the liquid. The beer is then pasteurized to kill any living yeast. Typically, canned and bottled beer is pasteurized. Beer in kegs may not be pasteurized, and must remain cold to prevent spoiling.

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Fermentation Process

Cooling wort quickly produced better beer. Early breweries used large, shallow pans made of wood lined with sheet metal to spread the wort over a large surface area. These pans were stacked allowing the wort to move from one pan down to the next, cooling more with each descending pan. Later, using loops of metal piping to run water through, brewers placed coils into the wort in an attempt to cool it.

Early lager breweries fermented and produced their beer during the winter and waited three months until spring, when the beer was ready for consumption, to sell to area establishments. The rising demand for lager required brewers to produce beer year round instead of during the winter only. Storage of lager for three months in a cool, undisturbed place posed a problem for many brewers. Many in the industry solved the problem by digging underground caves; however, caves did not always prove cold enough and required the use of supplemental ice to keep temperatures low.

In more rural areas, ice was often taken from nearby lakes and rivers, but in more urban and temperate areas, provision of ice became a major stumbling block in beer production. The need for a consistent supply of ice helped give rise to the ice industry. The commercial ice industry began in the Boston area in 1800, and in the 1820s over 3,000 tons of ice was exported every year. Boston companies dominated the ice market in the 1840s and 1850s by harvesting ice with the 1825 invention of the ice cutter.

Lager breweries required ice not only for storage, but also for the fermentation process, which occurs at lower temperatures than ales. Lager yeast is most effective at cool temperatures and reduces bacteria growth which can ruin beer. With a more consistent supply of ice and year round production, some breweries constructed ice houses for storage of large quantities of ice. During the late 1870s, large scale breweries had the capacity to store approximately 20,000 to 30,000 tons of ice per year.

The invention and commercial use of refrigeration around the late 1860s and early 1870s was embraced by the brewing industry. Brewers relished the guaranteed and consistent supply of ice. The ammonia compression machine dominated brewery ice houses in the 1880s and 1890s. Later, refrigeration that cooled without production of ice would free space previously taken by brewery ice houses, which then became obsolete.

Bottling Process

Breweries of the 1840s, 1850s, and 1860s primarily sold beer in casks or kegs. Bottles presented challenges in terms of spoilage and the beer's pressure on corks. Brewers that opted to bottle during these years often used pottery bottles. Later bottling options included wood, clay, or leather, which shielded the "imperfections" of the ale. With innovation in glassmaking in the last quarter of the 19th century, the sparkling clear color of the lager was highlighted by glass bottles.

With the discovery of pasteurization in the 1870s, beer bottling became a commercial practice. Louis Pasteur proved that steaming the finished product would kill harmful bacteria that could cause the beer to spoil. Adolphus Busch launched the popularity of bottling beer in the United States with "The King of Bottled Beer." By the mid-1870s, brewers began to sell bottled beer. Brewers would fill and cork bottles, then place bottles in a steaming water bath at 160 to 170 degrees. The glass bottles needed to be strong enough to withstand the changes in temperature, and glass factories expanded to meet the new demand for beer bottles.

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In early bottling operations, breweries used corks as stoppers, but corks were often forced out or loosened by the pressure of the beer during pasteurization, causing the beer to become flat. To minimize this problem, wires were placed over the corks to secure the cork to the bottle, but this process proved costly and time consuming. By the 1880s, a tin disk with a wire was widely used by breweries in the bottling process and was a successful solution to the problem. This invention, together with the improvements in the glassmaking industry, contributed to the popularization of bottled beer.

With the increased production of bottled beer, the Internal Revenue Service (IRS), which taxed beer by the cask, found it difficult to determine how much beer to tax for each brewery. To address this problem, the IRS passed regulations that required the bottling of beer to be separated from the main brewery. In general, this required breweries to move fermented casks of beer to a separate building, sometimes on the opposite side of a public way, where it would be counted for taxation prior to bottling. In some breweries, the brewery did not bottle the beer directly, but hired contractors for the task. To streamline the process while still allowing the taxation of beer, the brewing industry organized to revise the Internal Revenue Act to permit breweries to run beer from storage cellars to bottling houses via pipelines outfitted with measuring gauges rather than in casks or kegs. The new laws still required bottling houses and storage facilities to be separate from the brewery, but pipelines streamlined transmission of beer from the brewery.

The Highland Spring Brewery

Henry A. Rueter and John R. Alley, brewers from Germany and Ireland, respectively, founded the Highland Spring Brewery in 1867, deriving its name from its early water source at the foot of the nearby range of hills. Highland Spring Brewery produced lagers, ales, and porters. Production started with approximately 25,000 barrels but jumped to over 130,000 barrels in only four years time. The brewery employed between 60 to 70 men, presumably local Irish and German immigrants. Through this joint venture between an Irish and German immigrant, the Highland Spring Brewery capitalized on the rising interest in lager production throughout the nation, but also retained the industry's historical ties to ale production.

Founded when the rise of lager caught the attention of American beer drinkers, the Highland Spring Brewery leveraged interest in lagers, but also maintained the traditional beer style by producing ales and porters. Its importance as a traditional brewer is underscored by its recognition as the largest producer of ales and porters in the United States in the 1870s. The brewery gained national attention at the Philadelphia Centennial Exposition in 1876, winning the gold metal for its ale, despite Philadelphia's solid reputation for ales. Following the exposition, the Highland Spring Brewery's renowned ale elevated the importance of Boston breweries in the national beer industry.

John Alley left the Highland Spring Brewery in 1885, but Rueter remained and changed the brewery's name to Rueter & Company. Rueter's reputation among brewers was solidified by his role as president of the United States Brewers Association for many years during his brewing career. The brewery continued to operate until Prohibition.

The brewery operated from 1867 to 1885 in a complex (no longer extant) located on the current site of a surface parking lot at the base of Parker Street. Demolished in ca. 1965, the brewery structure, depicted in the attached ca. 1920 photograph, on the north side of Terrace Street, housed the manufacturing facilities for the company. After Alley formed his own company in 1885, Rueter expanded the Highland Spring Brewery to include refrigeration and a bottling and storage plant in the 1890s. The Highland Spring Brewery remained a family-managed and owned business after Rueter's death in 1899, when his three sons gained official control of the business.

(continued)

The Highland Spring Brewery design closely reflected the innovations and technology embraced by the brewing industry with steam power, a refrigeration unit, and bottling facility. By 1888, the main complex at the northwest corner of Terrace and New Heath Streets was designed for a top-down brewing process using steam power. The first step of "malting" occurred on the fourth floor, where mills ground the malt, and eight tanks were used to produce the mash by combining malt with water. The resulting wort was moved to the third floor, where it was brewed, boiled, and hops were added. Next, the wort was cooled, strained, and transferred to the first floor for the addition of yeast and fermentation. The beer was then moved to an open first-floor cooling area and subsequently to the barrel storage at the southwest corner of the main brewery complex, which included below-grade barrel vaulted cellars for aging the beer.

Highland Spring produced lagers as well as ales and porters which require different yeast, brewing temperatures, and cooling periods and times. Cooling would have been essential for producing lager, which must be cooled at lower temperatures for several months. This made the Bottling and Storage Building at 164 Terrace Street an important part of the brewing process, as the brewery relocated its below-grade barrel storage from the southwest corner of the main brewery complex by 1897 to this modern, above-grade structure. Consistent with the IRS tax regulations of the period requiring separate brewing and bottling buildings, this structure received beer from the main brewery and was bottled and stored in the building. This Bottling and Storage Building was also a critical transportation node with access directly to the adjacent railroad tracks, which made rapid delivery of the beer to consumers possible. In addition, proximity to the railroad allowed grain to be easily delivered to the brewery. Sanborn maps of the late 19th century show a railroad siding further north down Terrace Street, outside of the nomination area, that would connect the brewery and its production directly to the New Haven Railroad's main line to Providence and points south.

By 1897, the Highland Spring Brewery integrated condensed refrigeration units into its brewing process to improve production output. To accommodate the IRS tax regulations on beer production, a tunnel beneath Terrace Street (now filled) was constructed to connect the brewing complex with the Bottling and Storage Building across Terrace Street. Beer was transferred through pipelines that were regulated with gauges to determine the volume of beer produced, and ultimately bottled and shipped out of the Bottling and Storage Building by rail on the east side through the three levels of loading bays, and by wagon on the west side through loading docks on the first floor. Constructed in response to increased beer production, the Georgian Revival-style building at 154 Terrace Street was constructed in 1912 as an additional bottling/storehouse building for the casks and tanks of ale and porter. The building shared a party wall with the existing brick Bottling and Storage Building, was connected through openings at the lower levels, and provided a third loading dock for the brewery on the west elevation of the bottling/storage complex. The building was designed by Monks and Johnson, a firm of architects and engineers that specialized in the design of manufacturing buildings including storehouses, garages, and power plants. Monks and Johnson designed multiple commercial and industrial buildings in Boston and other communities, including the University Club of Boston on Stuart Street, the Everlastik Company Loft in Chelsea, the Dennison Manufacturing Company in Marlborough (NR 2008) and the steel-reinforced concrete L.H. Hamel Leather Company complex in Haverhill (NR 2009).

With the impending institution of Prohibition, an act authorized in 1919 but not in effect until January 1920, the brewery began downsizing its operations. The brewing process continued as a top-down operation in the main complex, the original bottling and storage was vacated, and bottling and storage limited to the newer 1912 building. The brewery stopped all operations in 1920, and the Rueter & Co. Highland Spring Brewery ceased to exist. Brewery operations just prior to Prohibition are depicted in the attached 1919 Sanborn Fire Insurance Map.

(continued)

The Croft Brewery

Records do not indicate if the brewery was occupied during Prohibition, although some sources suggest it was occupied by a metal and rubber company. One document also suggests that the 1892 Bottling and Storage building was to be converted into a candy factory in 1919; however, it is not known whether a candy operation ever opened at the site. Nevertheless, the potential alternative uses for the two bottling and storage buildings indicate the Reuter Company's efforts to reuse their existing building stock for some useful purpose in the 1920s with the sale of the 1912 building in 1925.

After the end of Prohibition in 1933, former Rueter & Alley brewmaster Walter J. Croft opened the Croft Brewery within the former Highland Spring Brewery complex, with the exception of the 1912 Bottling and Storage building, which had been sold to the Oliver Ditson Company in 1925. Croft initiated the operation by steam cleaning, sterilizing and refitting the building for brewing. Under the new company, Croft was the head brewmaster, and he shortly appointed R.P. Bischoff, the president of Burkhardt Brewing Company of Roxbury as the company's president. In March 1935, *Modern Brewery* magazine heralded Croft Ale as "America's Leading Ale" based on its number one sales record of ale in 1933. With his early success, the brewery could not meet demand by consumers, and Croft rationed distributors and customers to a weekly quota.

With business booming, Croft added new brewing kettles and bottling machines and aging tanks to the complex in 1934. Unfortunately, the new aging tanks proved disastrous for the brewery due to faulty linings. Although the linings were replaced, the new tanks were plagued with problems and ruined the beer's renowned taste. After this debacle, the sales of Croft Ale plummeted, and attempts to market other ales, including a cream ale, compensated for Croft Beer's damaged reputation, keeping the company afloat until World War II.

During the war, the military procured millions of cans and bottles of beer from America's largest lager producers. American servicemen developed a taste for these readily available beers, and upon their return to the United States, never returned to the ales produced by smaller breweries like Croft after the war. Struggling from these business setbacks, Croft was bought out by the Narragansett Brewery in 1952. Narragansett continued production at the Terrace Street brewery for only one year before closing the plant and moving Croft Ale production to their Rhode Island brewery until 1981, when it also closed.

The R & S Pickle Works, also known as Rosoff and Schorr's Pickle Works, purchased the 164 Terrace Street building from the Narragansett Brewery in the mid-1950s. The Rosoff family, including six brothers, immigrated to Watertown, MA, from Russia between 1920 and 1930. Earliest available records indicate the R & S Pickle Works had been located at 7 Holly Street in Roxbury in 1947, with the oldest brother, Samuel, as the president and his two younger brothers, Albert and Nathaniel, as the treasurer and corporate clerk. In 1958, R & S Pickle Works was approved for a Small Business Administration loan, likely to purchase and retrofit the old brewery building. The company produced kosher pickles in the building until the mid-1980s, when it was closed by new owners, Hebrew National; however, the Rosoff and Schorr's brand is still sold by the company. Since the 1980s, the building was used intermittently for storage of plumbing supplies, but was primarily vacant, open to the weather, and vandalized.

(continued)

The Oliver Ditson Company

While the 164 Terrace Street Bottling and Storage building remained in use as part of a brewery, the 1912 Bottling and Storage building at 154 Terrace Street was sold to the Oliver Ditson Company, one of the oldest and largest Boston-based music publishers, in 1925. Prior to 1786, there were no music publishers or music shops in America, with the exception of a shop established in Philadelphia in 1759. Until the close of the 18th century, music was typically distributed by printers of books, but the cost of publication was borne solely by composers or compilers. Boston's first noted music publisher was Peter Albrecht von Hagen, who began to publish in the late 1790s under the name P.A. von Hagen & Co. By the 19th century, the prosperity of Boston and its growing population made it profitable to establish companies devoted entirely to the printing and sale of music, previously limited due to the complexity of printing musical scores, as well as musical instruments.

The Oliver Ditson Company was founded by its namesake, Oliver Ditson, a native of Boston who partnered with his former employer, publisher Samuel Parker. The two formed a company called Parker & Ditson. In 1842, Ditson acquired Parker's ownership, and moved the business from the Old Corner Bookstore at School and Washington Streets in downtown Boston to 115 Washington Street in 1844. In 1857, the company was renamed the "Oliver Ditson Company," and John C. Hayes, a long-time employee, was promoted to part owner. Under this new name, the company moved again to 227 (now 451) Washington Street in downtown Boston.

Boston became renowned as the center for choral performances and publishing in the 19th century. In 1845, the first American edition of Haydn's *Creation* was issued by the Oliver Ditson Company. With the introduction of music study in Boston public schools in 1838, Ditson recognized a new music publishing opportunity and began production of music for education. Boston cornered the market in school-based music publishing for ten years before other cities introduced music study, prompting other publishing companies to begin publishing for public schools. Despite other publishers enjoying the new market, the expansion of music education was a windfall for Ditson. For example, Ditson's *Golden Wreath* by L.O. Merson was initially published in 1856 and sold over 300,000 copies by 1872.

By the early 1870s, the thriving music publishing company established branch houses in Chicago, Cincinnati, Philadelphia, and New York. In 1887, the Boston house of the Oliver Ditson Company employed 100 clerks and bookkeepers and had twenty printing presses in operation. The Boston headquarters of the Oliver Ditson Company was relocated to the Oliver Ditson Building at 178-179 Tremont Street, now located within and listed as a contributing resource to the Piano Row National Register District. While the main Tremont Street office building served as the showcase of the Oliver Ditson Company products, the company required a location to physically print and publish its music. The recently vacated Highland Spring Brewery building at 154 Terrace Street served this purpose.

In 1925, the company undertook a significant renovation of former Bottling and Storage building at 166 Terrace Street, including the relocation of the main pedestrian entrance, recarving the buildings entablatures with the company name, and enlargement of the windows on the west elevation. The first two floors were likely utilized for storage and shipping and the upper floors housed the printing and binding operations. In this building, the Oliver Ditson & Company produced the highly specialized printing of musical scores. During the early years, Ditson likely utilized typeset printing, which was labor intensive. Eventually, Ditson would have moved onto engraving for its sheet music, which could produce a very

(continued)

high-quality product. Eventually, lithography became the most cost-effective method of music printing which produced the highest quality results in the 19th and early 20th centuries. Ditson's printing presses likely utilized this method for quick and higher quality production.

The Oliver Ditson Company was purchased by the Theodore Presser Company in 1931, and continued to publish music at this location until the 1950s. Overall, the company published over 80,000 pieces of sheet music, including numerous pianoforte and organ pieces. By the 1970s, the 154 Terrace Street building was owned by the Barb Corporation and the Salem Press. It served as a warehouse for Graphique du France in the 1980s, continuing the building's long association with the publishing industry. Since then, the building lay vacant and open to deterioration and vandalism for over twenty years.

The former Highland Spring Brewery Bottling and Storage buildings were purchased in 2008 by Winn Development. The two buildings will be substantially rehabilitated into 61 units of low-income and market rate residential units (the dilapidated garage structure will be removed to rehabilitate the 1892 north elevation), utilizing low-income housing and state and federal historic rehabilitation tax credits.

(end)

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(end)

10. Geographical Data

Acreage of Property less than one acre

UTM References
(Place additional UTM references on a continuation sheet)

	Zone	Easting	Northing
1.	19	327092	4688187
2.			
3.			
4.			

_ See continuation sheet

Verbal Boundary Description
(Describe the boundaries of the property on a continuation sheet.) **See attached**

Boundary Justification
(Explain why the boundaries were selected on a continuation sheet.) **See attached**

11. Form Prepared By

name/title Taya Dixon, Senior Planner, Epsilon Associates, with Betsy Friedberg, NR Director, MHC

organization Massachusetts Historical Commission date April 2010

street & number 220 Morrissey Boulevard telephone 617-727-8470

city or town Boston state MA zip code 02125

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps
A **USGS map** (7.5 or 15 minute series) indicating the property's location.
A **sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs
Representative **black and white photographs** of the property.

Additional items (Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of the SHPO or FPO.)

name Pickle-Ditson Limited Partnership c/o Winn Development

street & number 6 Faneuil Hall Marketplace telephone 617-742-4500

city or town Boston state MA zip code 02109

VERBAL BOUNDARY DESCRIPTION

The Highland Spring Brewery Bottling and Storage Buildings includes City of Boston Parcel ID numbers 1000358000, 1000359000, and 100036000. The boundary extends north along the rear edge of the sidewalk on Terrace Street. The boundary then continues east along the building wall of 154-166 Terrace Street in a straight line to the rear property line abutting the MBTA Right-of-Way. The boundary then extends south straight along the property line to New Heath Street. The boundary then extends west along the property line abutting New Heath Street to the rear edge of the sidewalk on Terrace Street.

BOUNDARY JUSTIFICATION

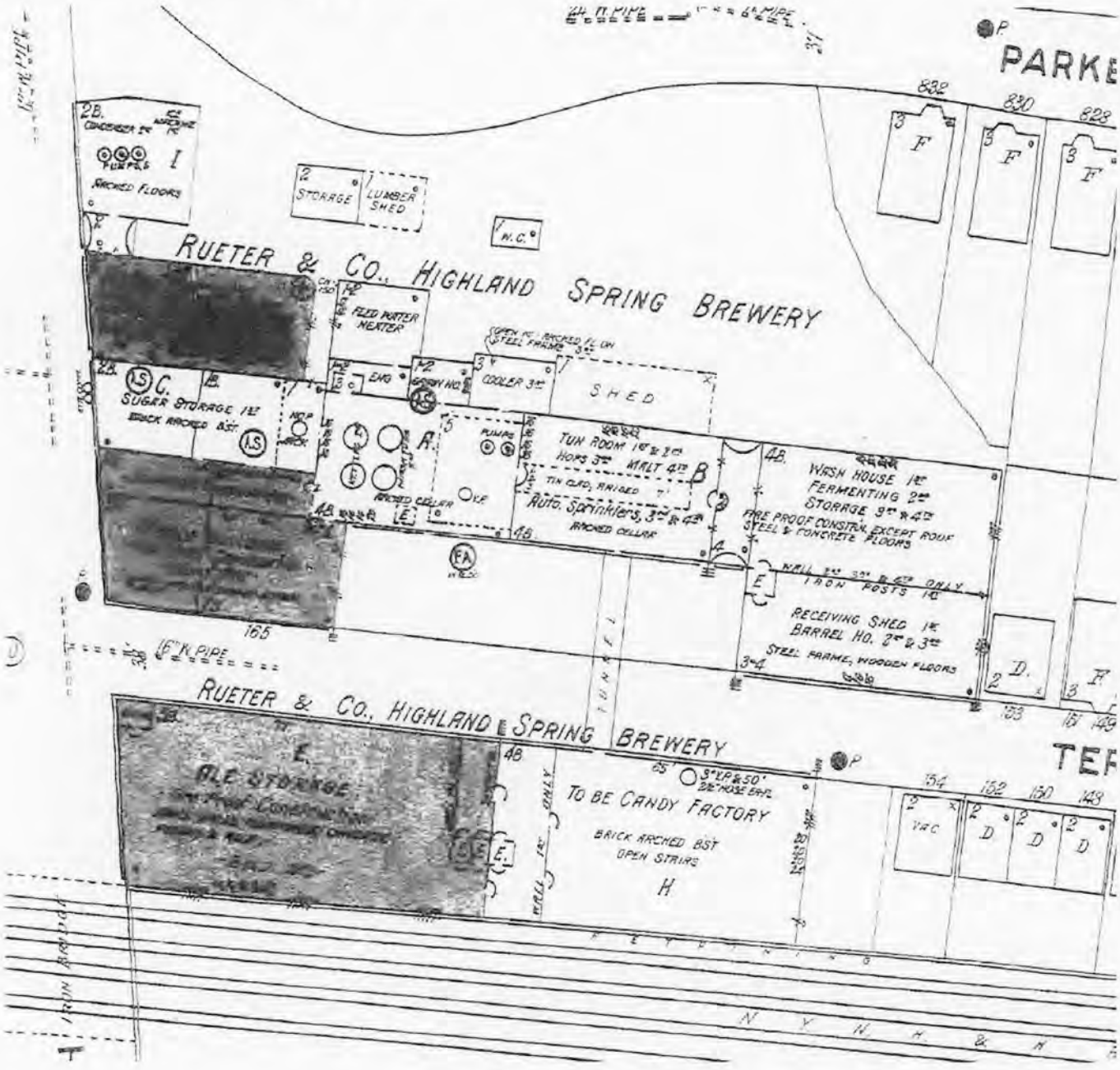
The boundaries of the Highland Spring Brewery Bottling and Storage Buildings are consistent with city lots laid out in 1892 and 1912, when the properties were owned by the Highland Spring Brewery.

(end)

DISTRICT DATA SHEET:

Parcel ID #	Property Address	Building Name	Date	Construction	Style	Type/Status
1000358000	164 Terrace St.	Highland Spring/ Croft Brewery Warehouse	1892	Heavy Timber frame	Industrial	B/C
1000359000	166 Terrace St.	Oliver Ditson Co. Building	1912/13	Steel reinforced concrete	Industrial	B/C
1000360000	154 Terrace St.	garage	ca. 1945	brick/concrete		B/C

1919 SANBORN FIRE INSURANCE MAP



CA. 1920 PHOTOGRAPH

ADDITIONAL DOCUMENTATION

LIST OF PHOTOGRAPHS

MA_Boston(Suffolk County)_Highland1.tif
- Name: Highland Spring Brewery Bottling and Storage Buildings*
- Location: 154-164 Terrace Street*
- Photographer: Brian Graves, Epsilon Associates, Inc.*
- Date: July 9, 2009*
- Location of Negative: Original Digital Image at Epsilon Associates Inc., Maynard, MA*
- Description of View: View east of west elevation 1892 building

MA_Boston(Suffolk County)_Highland2.tif
- Description of View: View east of west elevation 1912 building

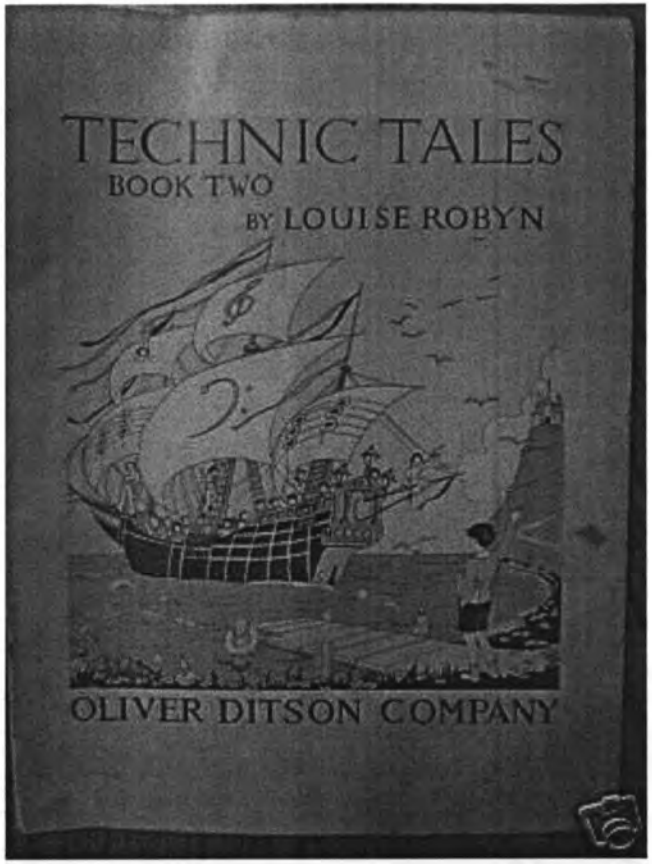
MA_Boston(Suffolk County)_Highland3.tif
- Description of View: View southwest of east elevation 1912 and 1892 buildings

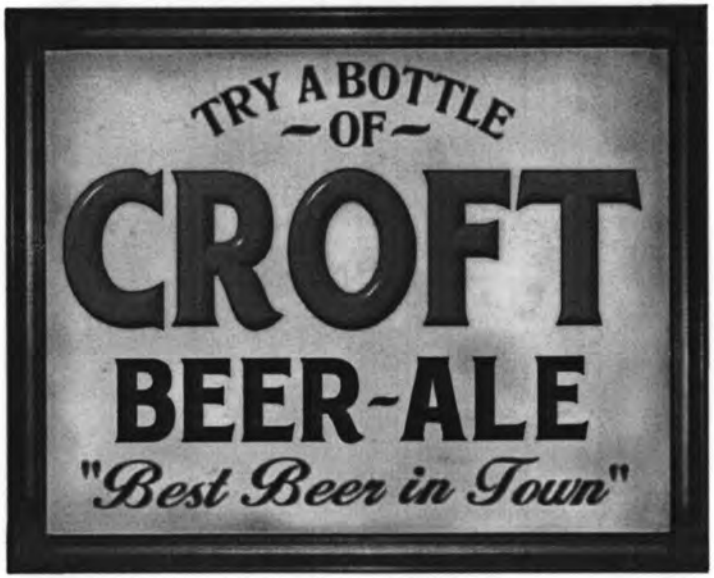
MA_Boston(Suffolk County)_Highland4.tif
- Description of View: View interior 1892 building, typical floor

MA_Boston(Suffolk County)_Highland5.tif
- Description of View: View interior 1912 building, typical floor

MA_Boston(Suffolk County)_Highland6.tif
- Description of View: View interior 1912 building, pedestrian entrance

*information the same for all photographs

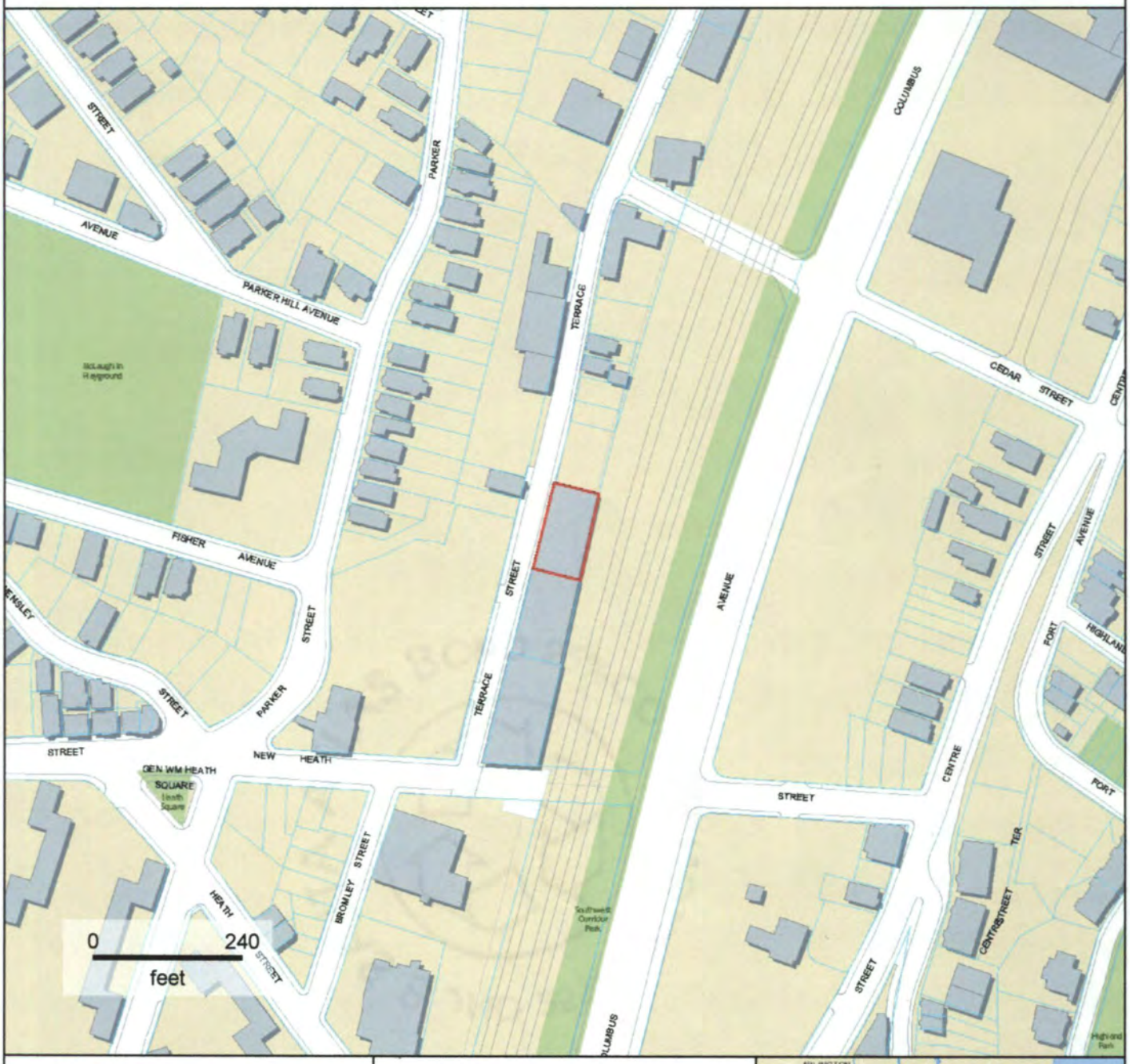




Marketing and Products produced at the

Highland Spring Brewery Bottling and Storage Buildings

Highland Spring, 154 Terrace



Property Information

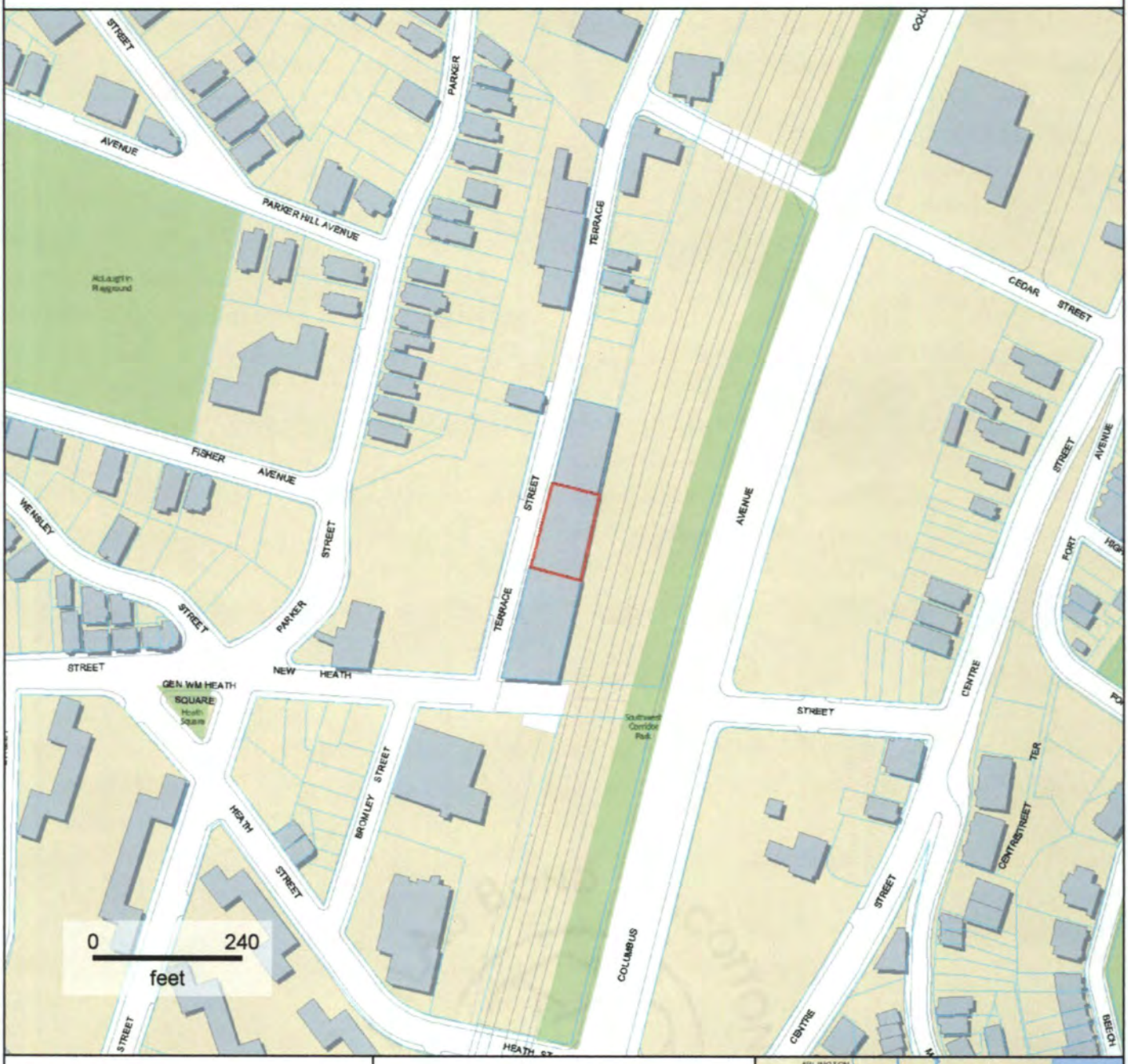
Parcel ID	1000360000
Owner	PICKLE FACTORY LLC
Address	154 TERRACE ST
Property Type	0317
Building Value	$296,679.00
Land Value	$216,386.00
Total Value	$513,065.00
Lot Size	7395 sq ft
Land Use	Industrial

BOSTONIA CONDITA A.D. 1630.

City of Boston MAPS

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

Highland Spring Brewery, 164 Terrace Street



Property Information

Parcel ID	1000359000
Owner	PICKLE FACTORY LLC
Address	164 TERRACE ST
Property Type	0317
Building Value	$299,959.00
Land Value	$218,778.00
Total Value	$518,737.00
Lot Size	7476 sq ft
Land Use	Industrial

BOSTONIA. CONDITA A.D. 1630.

City of Boston MAPS

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

Highland Spring, 166 Terrace

Property Information

Parcel ID	1000358000
Owner	PICKLE FACTORY LLC
Address	166 TERRACE ST
Property Type	0316
Building Value	$405,534.00
Land Value	$295,780.00
Total Value	$701,314.00
Lot Size	10107 sq ft
Land Use	Industrial

BOSTONIA. CONDITA A.D. 1630.

City of Boston MAPS

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

The City of Boston makes no claims, no representations, and no warranties, expressed or implied, concerning the validity (expressed or implied), the reliability, or the accuracy of the GIS data and GIS data products furnished by the City, including the implied validity of any uses of such data. The use of this data, in any such manner, shall not supercede any federal, state or local laws or regulations.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY NAME: Highland Spring Brewery Bottling and Storage Buildings

MULTIPLE NAME:

STATE & COUNTY: MASSACHUSETTS, Suffolk

DATE RECEIVED: 4/16/10 DATE OF PENDING LIST: 5/12/10
DATE OF 16TH DAY: 5/27/10 DATE OF 45TH DAY: 5/31/10
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 10000300

REASONS FOR REVIEW:

APPEAL:	N	DATA PROBLEM:	N	LANDSCAPE:	N	LESS THAN 50 YEARS:	N
OTHER:	N	PDIL:	N	PERIOD:	N	PROGRAM UNAPPROVED:	N
REQUEST:	N	SAMPLE:	N	SLR DRAFT:	N	NATIONAL:	N

COMMENT WAIVER: N

✓ ACCEPT ___ RETURN ___ REJECT 5.28.10 DATE

ABSTRACT/SUMMARY COMMENTS:

Entered in
The National Register
of
Historic Places

RECOM./CRITERIA_____

REVIEWER_____ DISCIPLINE_____

TELEPHONE_____ DATE_____

DOCUMENTATION see attached comments Y/N see attached SLR Y/N

If a nomination is returned to the nominating authority, the nomination is no longer under consideration by the NPS.

MA_Boston(Suffolk County)_Highland1.tif

View ~~east~~ of west elevation 1992 Building

BRIAN GRAVES PHOTO, EPSILON ASSOCS. JULY 2009

PHOTO 1

MA_Boston (Suffolk County)_ Highland 2.tif
View east of west elevation 1912 building

BRIAN GRAVES PHOTO, EPSILON ASSOCS. JULY 2009

PHOTO 2.

MA_Boston(Suffolk County)_Highland 3.tif

View southwest of east elevation 1892 + 1912 buildings

BRIAN GRAVES PHOTO. EPSILON ASSOCS. JULY 2009

PHOTO 3

MA_Boston(Suffolk County)_Highland 4.tif
View of interior 1892 building, typical floor

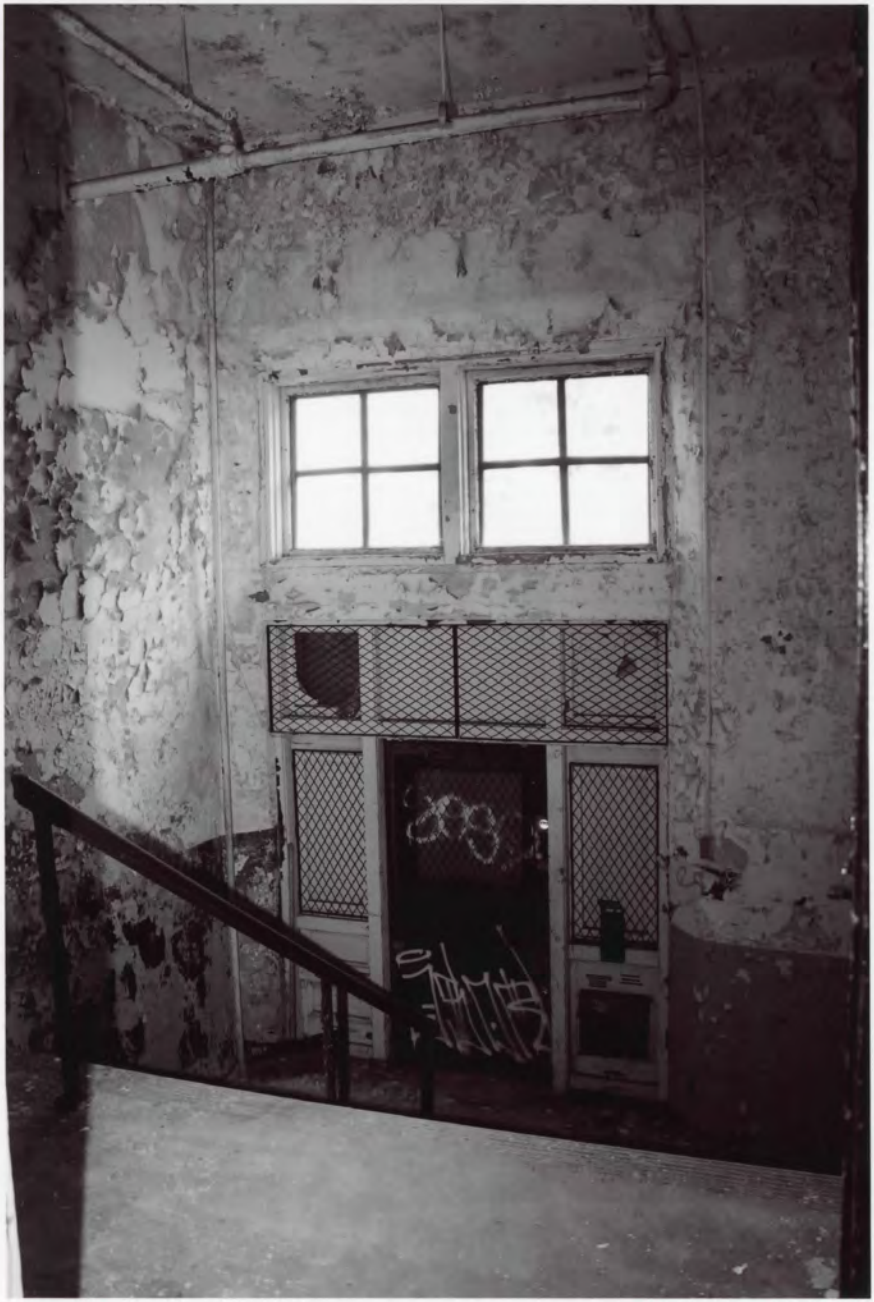
BRIAN GRAVES PHOTO, EPSILON ASSOCS. JULY 2009

PHOTO 4

MA_Boston (Suffolk County)_Highland 5.tif
View of interior 1912 building, typical floor

BRIAN GRAVES, EPSILON ASSOCS. PHOTO JULY 2009

PHOTO 5



MA - Boston (Suffolk County) - Highland6.tif
View of interior 1912 building, pedestrian entrance

BRIAN GRAVES, EPSILON ASSOCS. PHOTO JULY 2009

PHOTO 6

HIGHLAND SPRING BREWERY BOTTLING & STORAGE BLDGS

42071-C1-TM-025

Boston South

MASSACHUSETTS

BOSTON [ROXBURY] (SUFFOLK) MA

1:25 000-scale *metric* topographic map

7.5 X 15 MINUTE QUADRANGLE SHOWING

- Contours and elevations in meters
- Highways, roads and other manmade structures
- Water features
- Woodland areas
- Geographic names

U.S. DEPARTMENT OF THE INTERIOR · March 3, 1849

GEOLOGICAL SURVEY

1987

BOSTON SOUTH, MASSACHUSETTS

7.5 X 15 MINUTE SERIES (TOPOGRAPHIC)

Zone 19
4687920
327092

154-164 Terrace Street

1 KM. TO INTERSTATE 59 / 7.6 KM. TO INTERSTATE 93 · 1.2 KM. TO I-95 · 2.5 KM. TO INTERSTATE 95 · 5.5 KM. TO INTERSTATE 93 / STOUGHTON 14 KM. · MILTON 0.3 KM. / RANDOLPH 9.2 KM. · 1.6 KM. TO INTERCHANGE 24 / PLYMOUTH 46 KM.

INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1987

KILOMETERS 1 .5 0 1 2 3 4 · MILES 1 .5 0 1 2

SCALE 1:25 000

1 CENTIMETER ON THE MAP REPRESENTS 250 METERS ON THE GROUND

CONTOUR INTERVAL 3 METERS

500 0 1000 2000 3000 4000 5000 METERS

1000 0 2000 4000 6000 8000 10 000 12 000 14 000 16 000 FEET

BOSTON SOUTH, MASSACHUSETTS
42071-C1-TM-025
1987

Produced by the United States Geological Survey in cooperation with Massachusetts Department of Public Works

Control by USGS, NOS/NOAA, and Commonwealth of Massachusetts agencies

Compiled by photogrammetric methods from aerial photographs taken 1978. Field checked 1979. Map edited 1987

Supersedes Newton and Boston South 1:25,000-scale maps dated 1970

Selected hydrographic data compiled from NOS charts 13270 (1982) and 13272 (1982). This information is not intended for navigational purposes

Projection and 1000-meter grid: Universal Transverse Mercator, zone 19

10,000-foot grid ticks based on Massachusetts coordinate system, mainland zone

1927 North American Datum

To place on the predicted North American Datum 1983, move the projection lines 6 meters south and 42 meters west as shown by dashed corner ticks

There may be private inholdings within the boundaries of the National or State reservations shown on this map

CONTOUR INTERVAL 3 METERS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
CONTROL ELEVATIONS SHOWN TO THE NEAREST 0.1 METER
OTHER ELEVATIONS SHOWN TO THE NEAREST 0.5 METER
DEPTH CURVES AND SOUNDINGS IN METERS
DATUM IS MEAN LOW WATER
THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE
SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER
THE MEAN RANGE OF TIDE IS APPROXIMATELY 2.9 METERS

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

CONVERSION TABLE

Meters	Feet
1	3.2808
2	6.5617
3	9.8425
4	13.1234
5	16.4042
6	19.6850
7	22.9659
8	26.2467
9	29.5276
10	32.8084

To convert meters to feet multiply by 3.2808

To convert feet to meters multiply by 0.3048

DECLINATION DIAGRAM

MN · GN · 16° 284 MILS · 1°26′ 25 MILS

UTM grid convergence (GN) and 1987 magnetic declination (MN) at center of map
Diagram is approximate

ADJOINING MAPS

1	2	3
4		5
6	7	8

1 Maynard
2 Boston North
3 Lynn
4 Framingham
5 Hull
6 Medfield
7 Norwood
8 Weymouth

ISBN 0-607-00135-6

Topographic Map Symbols

- Primary highway, hard surface
- Secondary highway, hard surface
- Light-duty road, hard or improved surface
- Unimproved road; trail
- Route marker: Interstate; U. S.; State
- Railroad: standard gage; narrow gage
- Bridge; drawbridge
- Footbridge; overpass; underpass
- Built-up area: only selected landmark buildings shown
- House; barn; church; school; large structure
- Boundary:
  - National, with monument
  - State
  - County, parish
  - Civil township, precinct, district
  - Incorporated city, village, town
  - National or State reservation; small park
  - Land grant with monument; found section corner
  - U. S. public lands survey: range, township; section
  - Range, township; section line: location approximate
- Fence or field line
- Power transmission line, located tower
- Dam; dam with lock
- Cemetery; grave
- Campground; picnic area; U. S. location monument
- Windmill; water well; spring
- Mine shaft; prospect; adit or cave
- Control: horizontal station; vertical station; spot elevation
- Contours: index; intermediate; supplementary; depression
- Distorted surface: strip mine, lava; sand
- Soundings; depth curve
- Perennial lake and stream; intermittent lake and stream
- Rapids, large and small; falls, large and small
- Submerged marsh; marsh, swamp
- Land subject to controlled inundation; woodland
- Scrub; mangrove
- Orchard; vineyard

A pamphlet describing topographic maps is available on request

FOR SALE BY U.S. GEOLOGICAL SURVEY
DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092

The Commonwealth of Massachusetts
William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

April 8, 2010

Mr. J. Paul Loether
National Register of Historic Places
Department of the Interior
National Park Service
1201 Eye Street, NW 8th floor
Washington, DC 20005

Dear Mr. Loether:

Enclosed please find the following nomination form:

Highland Spring Brewery Bottling and Storage Buildings, 154-166 Terrace Street, Boston [Roxbury/Mission Hill] (Suffolk), MA

The nomination has been voted eligible by the State Review Board and has been signed by the State Historic Preservation Officer. The owners of the property in the Certified Local Government community of Boston were notified of pending State Review Board consideration 60 to 90 days before the meeting and were afforded the opportunity to comment.

Sincerely,

Betsy Friedberg

Betsy Friedberg
National Register Director
Massachusetts Historical Commission

enclosure

cc: Taya Dixon, Epsilon Associates, consultant
Lawrence Curtis, Pickle-Ditson LP, Winn Development
Emily Wolf, Boston CLG coordinator
Thomas Menino, Mayor, City of Boston
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