

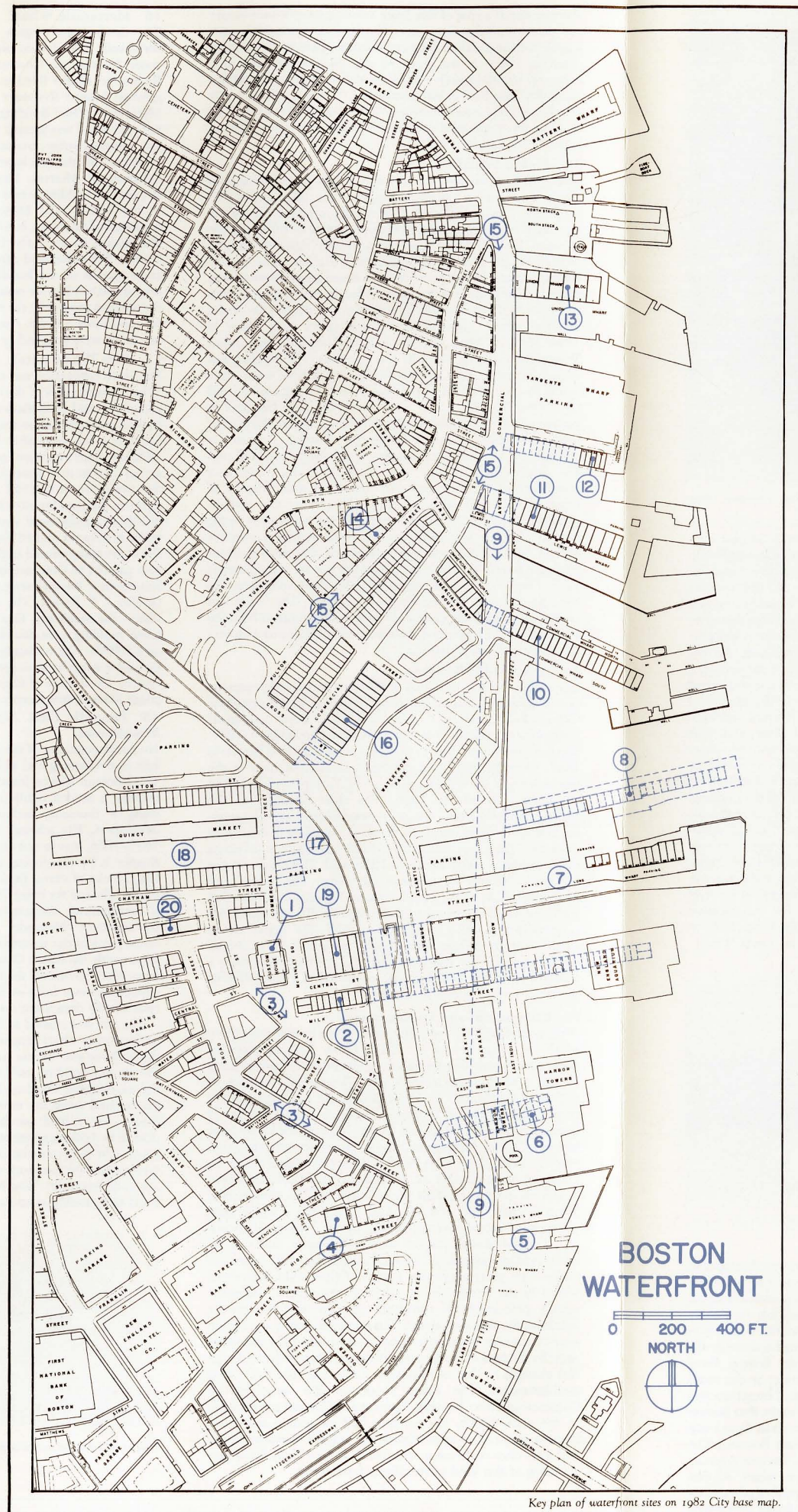
# 13th Annual Conference

Society for Industrial Archeology  
Boston 1984

## Sunday Afternoon Tour June 17



Boston Waterfront



Key plan of waterfront sites on 1982 City base map.

### 01 United States Custom House

The symbolic center of Boston's Victorian era waterfront, the originally domed Custom House was designed by Ammi B. Young and built between 1837 and 1847. Built on filled land, the lengthy construction was at least partly due to the problem-fought driving of the foundation piling, which took up the first three years of construction. The building as originally conceived is considered to be one of the finest Greek Revival style buildings built in the United States. Although now landlocked, its original setting was more consciously maritime. For several years after its completion the Custom House stood next to the waterfront's margin at the end of the quarter-mile long slip between Long and Central wharves. The building's massively scaled granite work is an outstanding example of the production of the Quincy quarries and stone finishing shops. Especially noteworthy are the giant monolithic, fluted column shafts. The tower, designed by Peabody and Stearns, was added in 1913-1915, converting the original building into the base of what was Boston's tallest building for many years. The observation deck is on the 25th floor of the 29 story building.

### 02 Central Wharf

Central Wharf was Uriah Cotting's third waterfront development project (after Broad and India streets and India Wharf) in the Town Cove area south of Long Wharf. After a ten-year development hiatus following the completion of India Wharf, caused by the economic dislocations of embargo and war, Central Wharf and its stores were built in 1816-1817. The wharf was a granite retaining walled landfill structure, one quarter mile long, that nearly equaled the length of adjacent Long Wharf. The row of 54 brick stores built on Central Wharf at nearly 1300 feet in length were said to be the longest row of connected warehouses in the country. The stores contained full basements, kept relatively dry by a tight double-plank floor with air space between, from which seepage was regularly pumped. The design of the warehouses is attributed to Charles Bulfinch. The prominent architectural feature of the original building was the central passageway through the building, expressed by a pedimented, cross-gabled pavilion topped by a large octagonal cupola. The large rooms in the three stories over the passageway were planned as auction rooms. The whole center composition was decidedly in the Bulfinch manner, reminiscent of the Arch Street passageway through the Tontine Crescent and a similar passageway through the India Wharf Stores.

Central Wharf was frequented by ships engaged in the Mediterranean fruit trade and by coastal steamers during the mid-19th century. Only the western eight of the Central Wharf Stores survive, located between Central and Milk streets east of India Street. The grand pavilion was lost in 1868 when a swath was cut through the center of the building for the new Atlantic Avenue. The other lost stores were gradually demolished to make way for a number of government-sponsored projects in the 20th century: the right-of-way for the Central Artery (Fitzgerald Expressway) in the early 1950s, the New England Aquarium in the late 1960s, and the Atlantic Avenue relocation in the mid-1970s.

### 03 Broad and India Streets

Large-scale redevelopment of the haphazard waterfront of the Colonial era was initiated by the Broad Street Association, a corporation formed in 1805, which filled in the old wharves along Battery March Street, laid out new wide streets and lots, and built blocks of stores for sale on the newly created land. With the concurrent India Wharf project, the Broad and India streets development figures as one of the earliest urban renewal projects in the country. The well-connected Association incorporators were led by developer Uriah Cotting, and included Harrison Gray Otis and Francis Cabot Lowell. Site planning and building design were by Charles Bulfinch. The principal streets were Broad Street, which subsumed the old quayside part of Battery March, and India Street, which formed the wide new marginal quay. The uniformly-designed brick stores that lined the new streets were built primarily in 1806-1807.

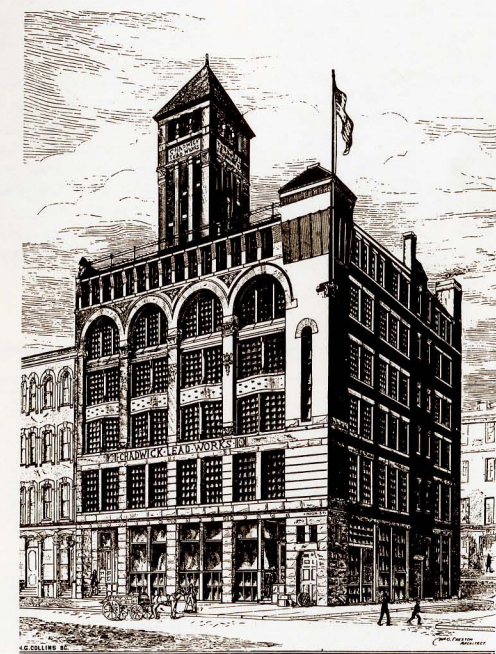
The Federal-style buildings immediately became the fashionable counting-room address for several prominent businessmen and later members of the Boston Associates of textile manufacturing fame, including Nathan and William Appleton, and Patrick Tracy Jackson, as well as Cotting and Lowell. Several of these buildings on Broad, Milk, and India streets survive in some form—most significantly, the altered store at 64 Broad Street where Francis Cabot Lowell is reported to have built in 1812-1813 the prototype of the first successful American power loom. The first production models were built and put into use at the Boston Manufacturing Company in Waltham, Massachusetts, the next year.



Central Wharf to left of slip and India Wharf to right, with India Street in foreground in 1857.

### 04 Chadwick Lead Works

The Chadwick Lead Works was founded in 1862 as Joseph H. Chadwick and Company. Chadwick had been previously employed at the Boston Lead Works in Roxbury. In 1878 the firm was reorganized as the Chadwick Lead Works and moved to Fort Hill following the completion of the leveling of the hill, which had become a slum area, for Town Cove fill and its redevelopment for industrial uses after 1872. The existing Richardsonian Romanesque building was built in 1887 across Fort Hill Square from the earlier buildings. The new building was designed by architect William G. Preston. The red terra cotta and sandstone trim and pressed brick is noteworthy. The rear tower was a shot tower and contained a small melting furnace at the top. Lead products manufactured by Chadwick were diverse, including shot, pipe, sheet, ribbon and tape, white lead and solder. It is uncertain how much and what kinds of production took place in this building, since from ca. 1890 Chadwick owned a lead factory in Salem and after 1901 was merged with the Boston Lead Company and the offices moved. The building and an adjacent one were remodeled in 1981 for office and commercial use.



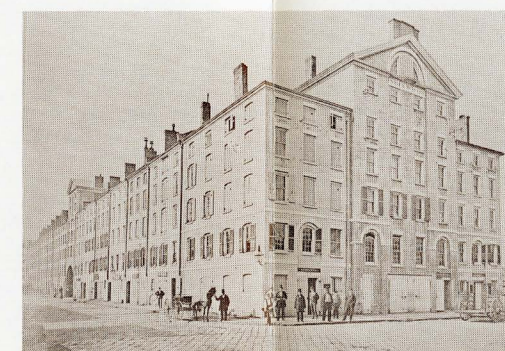
CHADWICK LEAD WORKS BOSTON

### 05 Rows and Fosters Wharves

Two small wharves little changed in size or configuration since about 1800, Rows and Fosters wharves had brick warehouses built on them early in the 19th century. These warehouses have been demolished for some years. More significantly, the slip between these wharves was the long-time Boston ferry terminal of the Boston, Revere Beach and Lynn Railroad, a narrow-gauge commuter line whose railroad maritime terminal was on Marginal Street in East Boston. Opened in 1875, it was a competitor of the Eastern Railroad for commuters from Lynn. Passenger service continued until 1940 when the Sumner Tunnel finally put it out of business. The pile racks of the ferry slip still remain between the two wharves. Rows and Fosters wharves are currently prime candidates for redevelopment, very possibly with high-rise, high-income buildings that are likely to restrict visual access and public maritime use of the waterfront. In the meantime, several excursion and commuter boats tenuously dock at these wharves.

### 06 India Wharf

India Wharf was planned in conjunction with the Broad Street project, and was financed by a group of investors almost identical in makeup to those of the Broad Street Association. The group was again headed by Uriah Cotting and was incorporated as the Proprietors of India Wharf. Charles Bulfinch's plan called for a five-story brick block of 33 stores built on a new landfill wharf. In its early years, India Wharf served ships and housed merchants trading in the East and West Indies and in Southern cotton. The warehouse was a revolutionary departure for such a functional building type in its size, masonry construction on fill, plan, and architectural effect. The stores were unusually arranged in two back-to-back rows, thus having doors and windows on only one side. Architecturally the building was raised above the ordinary by its pedimented central pavilion containing a two-story cross-gabled section with a two-story arched passageway at apron level. The extra wide east end was equally studied with a similar gabled pavilion projecting from the end of the hipped main roof. The building was built during 1804-1807, but survived unchanged only until 1868 when the central passageway pavilion and several stores to the west of it were demolished for Atlantic Avenue. The east end came down in 1962 for a parking lot; the severed west end apparently was demolished in the late 1960s as a result of assembling the parcel for the Harbor Towers apartments. The twin highrise Harbor Towers was built on India Wharf in 1973.



India Wharf in the 1860s before construction of Atlantic Avenue.

### 07 Long Wharf

Since its original construction, which started in 1710 and was completed by 1722, Long Wharf has served as the principal dock of the Boston Waterfront. The wharf originally extended from the foot of State Street over 1700 feet across the tidal mud flats to beyond the low-water line. Subsequent landfilling begun in the early 19th century reduced it to about two thirds of its original length by 1855 and to one half by 1869. The granite bulkhead retaining wall of this landfill wharf was reconstructed in 1857. From the first, warehouses, maritime shops, and counting houses lined the north side of the wharf. By the early 19th century this disconnected row of buildings included several blocks of brick warehouses. Only one of these brick buildings survives: a block of three stores, three stories in height known as the Gardner Building, which now houses the Chart House restaurant. The Gardner stores give a good approximation of the appearance of the many similar brick buildings once prolific in the waterfront area.



Long Wharf, with Gardner Building and Custom House Block in background.

Just beyond the Gardner Building is the Custom House Block, containing eight stores, essentially brick but having a granite-faced Greek Revival front facade. It was designed by Isaiah Rogers and built in 1848. The name of the building, carved in granite in high relief on the central pavilion, suggests a connection with the Custom House—and there was. The Custom House Block, although privately developed, was leased to the Federal government until at least 1862 for use as inspector's offices, warehousing, and immigration facilities. Upon study, the facade reveals a subtle asymmetrical mass overlaying a plan symmetrically arranged around a central arched passageway. The hipped-roof central pavilion once contained an octagonal cupola which was removed in 1874, although the pedestal on which it sat remains. The Custom House Block was remodeled in 1973 for residential and office use. During the most active period of waterfront activity in the 19th century, Long Wharf was a dock for coastal packets. Today it serves as the dock for several harbor excursion boats and the Provincetown Ferry.



Gardner Building and Custom House Block on Long Wharf to left of slip, and Central Wharf to right, ca. 1866.

### 08 T Wharf

About halfway out the original Long Wharf was an extension to the north called T Wharf because of its shape. This extension was founded on part of the abandoned 17th-century stone Barricado sea wall. The T-shaped extension from the old sea wall was in place by the late 18th century. The wharf was further extended eastward as a timber pile supported wooden pier to the end of Long Wharf in the early 19th century. In its early history, T Wharf was used by coastal packet boats, but by the late 19th century fishing schooners began to prevail at the dock. In 1882-1883, T Wharf was rebuilt as Boston Fish Pier with a uniform row of new frame stores for use by fish dealers and processors. With the removal of the fish processors and the primary fishing fleet to a new Fish Pier in South Boston in 1914, T Wharf was gradually taken over by a resident colony of writers and artists until displaced by the urban-renewal demolition of T Wharf ca. 1960. Pilings still mark the location of the old pier north of Long Wharf. The landfill western portion of T Wharf is now occupied by part of the Long Wharf Hotel. Vague plans have recently been advanced for eventually rebuilding T Wharf as a marina.



T Wharf in 1907.

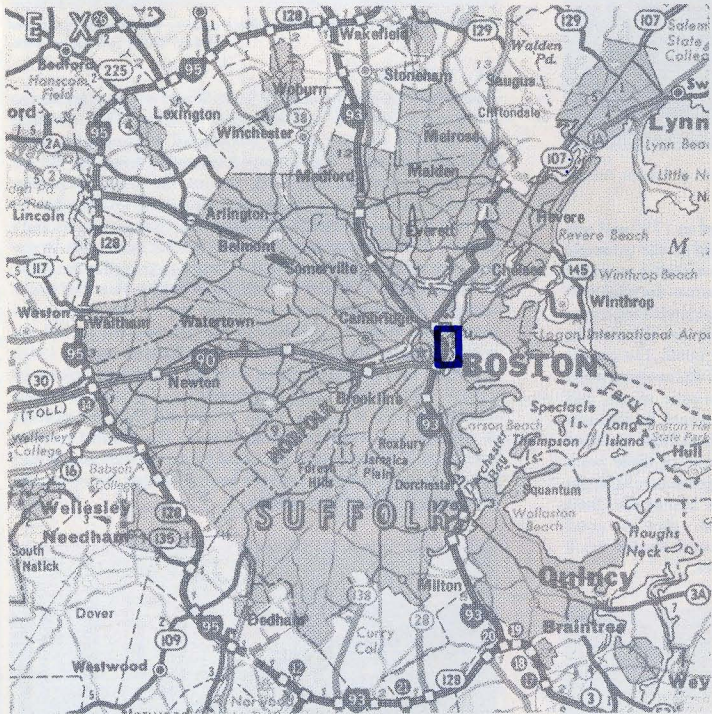


09 Atlantic Avenue

The Town Cove indentation of the Shawmut Peninsula was the central dock area of the Boston colonists. To protect the harbor from Spanish raiders, a stone sea wall called the Barricado was built across Town Cove in a straight line between the North and South batteries in 1672. It soon outlived its usefulness, however, and was abandoned. Through the 18th century, the waterfront's marginal streets were Battery-march (to the south) and North streets, which followed the old high tide line forming the original cove. Waterfront development during the early 19th century filled in the old wharves, but maintained the curved shape of the Town Cove waterfront along the new marginal streets, India(to the south) and Commercial(to the north), while reducing the cove to about half its original size and extending the new wharves well beyond the line of the old Barricado.

With the coming of the railroads to terminals in the North End and South Cove, starting in the mid-1830s, it was soon recognized that teaming transfer freight circuitously through the increasingly congested waterfront area between the stations was no longer reasonably possible. Thus, as early as 1846 a proposal was advanced calling for a wider, straighter, more direct route between the northern and southern railroad terminal areas by creating a new street through the wharves on roughly the same line as the old Barricado. To do this, a massive landfill of the remaining Town Cove was necessary. Although the granite warehouse building of the 1850s began this infill, it was accelerated to completion by filling a causeway along the line of the Barricado and the construction of Atlantic Avenue on it in 1868–1869. The remaining cove west of the new street was then filled by 1872. Unfortunately, the new street cut across every one of the masonry wharf buildings between India and Union wharves in connecting upper Commercial Street with lower Broad Street, necessitating the removal of any building within the 100 foot right-of-way.

To mark the decline of the old port and the rise of maritime railroading in its place, a surface freight rail line connecting the northern and southern terminal areas and the wharves in between, the Union Freight Railroad, owned by the New York, New Haven and Hartford Railroad, was built in Atlantic Avenue and Commercial Street at the end of the century. The Boston Elevated Railway, part of Boston's original rapid transit system, was located on the same right-of-way in Atlantic Avenue and Commercial Street from 1901 until 1942. The part of Atlantic Avenue between Commercial and India wharves was relocated about a block to the west in the early and mid-1970s to assemble the waterfront parcels on which Waterfront Park, the Long Wharf Hotel, and Harbor Towers and adjacent parking garage were built. The passageway through the hotel and pedestrian walks at the park's bulkhead and in front of the Aquarium follow the approximate line of Atlantic Avenue.



This brochure was written by Charles Parrott, who, with Peter Stott, was also responsible for its production.



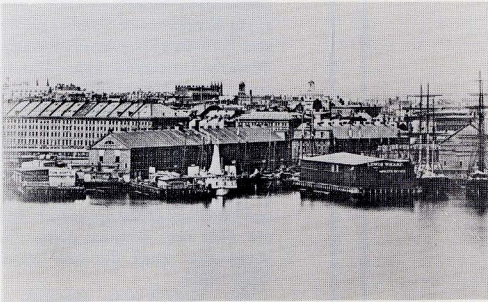
State Street/Long Wharf, T Wharf, and Commercial Wharf, from foreground to background with Atlantic Avenue in the early 1870s.

10 Commercial Wharf

Commercial Wharf was built in conjunction with the development of Commercial Street in 1832–1834. The Commercial Wharf building, originally a four-story block of some 33 stores, was designed by Isaiah Rogers. Like several of the other granite warehouse blocks, the rear elevation is largely brick—in this case the upper three stories. The austere Greek Revival character of the gable-roofed mass (the west end was hipped) was softened by the faceted dogleg turn of the building about a quarter of the way from its west end. The building was severed when five stores were removed for Atlantic Avenue in 1868, although original stone was used to finish the scars. A mansard Second Empire roof still crowns the store facing the east side of the Atlantic Avenue. Other changes have included wall alterations at many second (counting room) floors, replacement of original gabled dormers with various roof projections, and addition of balconies. Much of this exterior remodeling occurred when the buildings were converted to residential and new office and commercial use in the late 1960s and early 1970s. Originally a major dock for trans-oceanic shipping, Commercial Wharf was mostly used by the fishing industry and fleet after the mid-19th century.

11 Lewis Wharf

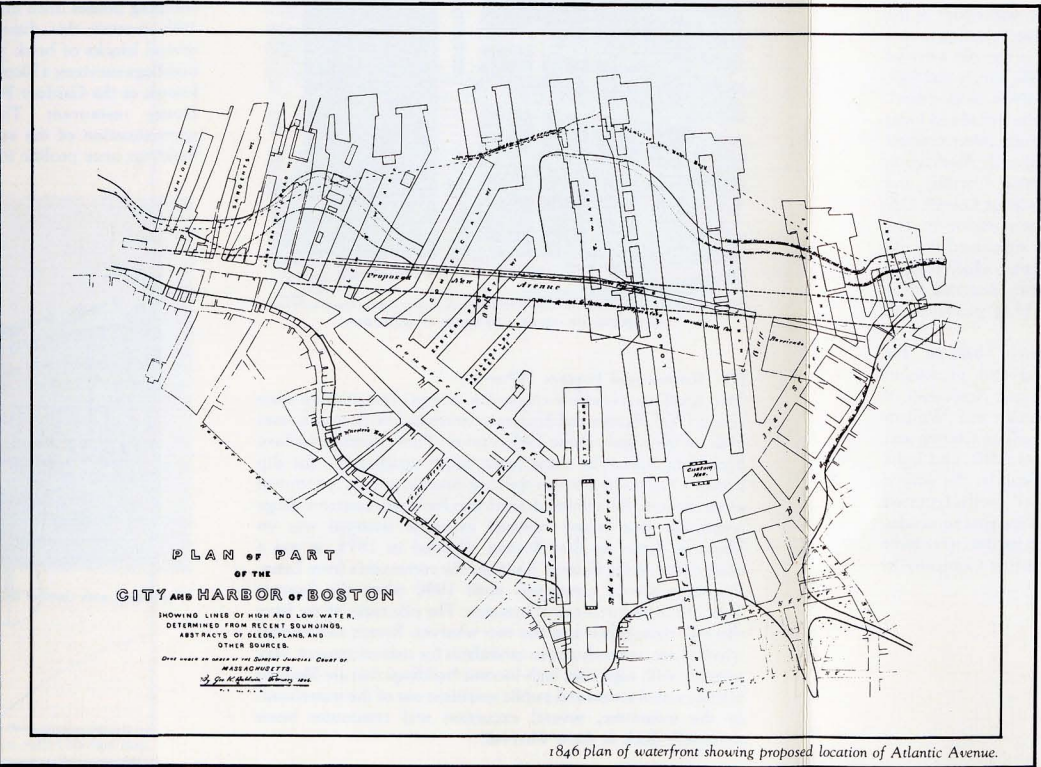
Like Commercial Wharf, Lewis Wharf was developed by a merchant syndicate associated with the Commercial and Fulton streets project. Named after one of these developers, Samuel S. Lewis, Lewis Wharf was an expansion of 18th-century Hancocks Wharf. Construction of the Lewis Wharf Stores took place in 1836–1838 to a Greek Revival design attributed to architect Richard Bond. The row of 18 original stores was four stories with a pedimented gable roof containing dormer windows. The building is granite faced, both front and rear. Three original stores were removed from the west end (the end store remained isolated across Atlantic Avenue for some years) to make way for Atlantic Avenue in 1968. The new end walls were carefully reconstructed using original stone, and as at Commercial Wharf, the end stores were topped with two-story mansard roofs. When the remaining stores were remodeled for residential and new office and commercial use in 1969–1971, this mansard roof was extended the full length of the building, replacing the original gabled one. The granite, pedimented gable was removed from the east end at that time, but the original slab of granite "Lewis Wharf" relief lettering was salvaged and now sits in a park area in front of the building. Numerous balconies were added to the facades during this remodeling and numerous new windows cut through the virtually blank granite east end wall. Lewis Wharf was originally a dock for trans-oceanic shipping, including clipper ships in the 1850s. From 1875 to 1927 the harbor pilots were headquartered on Lewis Wharf.



Mercantile, Commercial, and Lewis wharves, from left to right, in 1877.

12 Eastern Railroad Wharf

When the Eastern Railroad opened between East Boston and Salem in 1839, it also began running a connecting passenger ferry from this wharf to a maritime railroad terminal at Lewis Street in East Boston. The Eastern operated this train-ferry service until 1854 when the railroad's direct rail connection into Boston near the other North End railroad terminals was inaugurated. Meanwhile, in 1852, the East Boston Ferry Company was established to provide ferry service on this route to serve the growing population of East Boston. This service was taken over by the City in 1870 and operated as the East Boston or South Ferry. (The North, or Peoples, Ferry ran from a slip between Lincoln and Battery wharves to East Boston.) The twin-slip terminal was located at the end of Eastern Avenue, which still runs down the center of the original wharf. All that remains of the ferry terminal is a solitary bundle of pilings that marked the end of one of the ferry slips. South of Eastern



1846 plan of waterfront showing proposed location of Atlantic Avenue.

16 Mercantile Wharf

The development rights to create what was to become Mercantile Wharf were obtained by Milton J. Stone, and the water frontage on Commercial Street between Clinton and Richmond streets filled in by 1855. In 1856–1857, a wide, gambrel hipped five-story block of granite stores called the Mercantile Wharf Buildings were built on the new wharf. This time the wharf was located parallel rather than perpendicular to the marginal street, probably because of the cramped space available in the enclosed angular basin between T and Commercial wharves. Designed by architect Gridley J. F. Bryant, the building is in the Renaissance Revival style popular in the 1850s. The Mercantile Wharf Buildings originally consisted of 16 stores, but five at the southern, angled end were demolished in the early 1950s to make way for the Central Artery. The unfinished demolition scar presents an interesting cross section of the building. The remaining 11 stores were remodeled in 1976 for residential and commercial use. Save for the window treatment, the exterior is probably the most original in appearance of the remodeled wharf buildings, since no balconies were attached or roof projections added.

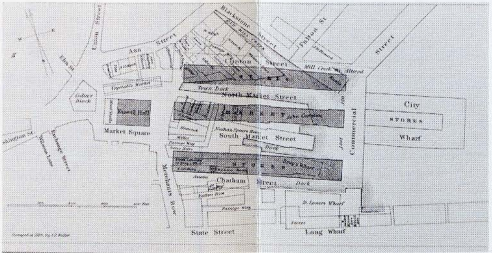
17 City Wharf (site)

Similar in conception and execution to Mercantile Wharf, City Wharf was the area of the waterfront directly opposite the east end of Faneuil Hall Market and its warehouses. Faneuil Hall Market presented an unobstructed view to and from the harbor for only a few years after its completion in 1826. By the late 1830s, a wharf structure and building had been built on new fill across Commercial Street from the market. The City formalized this arrangement in 1852 when they auctioned development rights to this land for more highly capitalized development. Two blocks of granite-faced warehouses were built on an expanded wharf here in the mid 1850s. As at Mercantile Wharf, they were five-story granite-faced buildings with gable roofs, oriented in a row parallel to Commercial Street. The buildings were in the Renaissance Revival style, and their design is attributed to Gridley J. F. Bryant. The northerly building contained seven stores, the southerly, four. The northerly two stores of the north building were demolished for the Central Artery in the early 1950s. The remaining stores survived until 1970 when they were swept away as part of the Waterfront Urban Renewal Project. On the site of City Wharf, a commercial development called Marketplace Center is now under construction.

18 Faneuil Hall Market (Quincy Market) and Warehouses

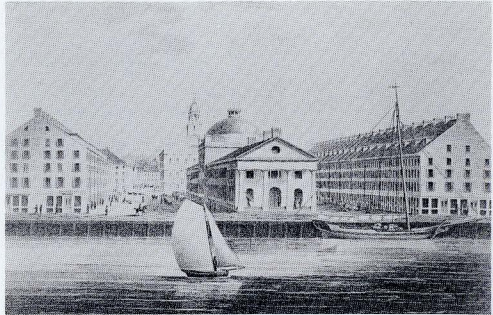
No doubt cognizant of the success the Broad Street Association had in developing and selling their commercial properties, in 1824 Boston Mayor Josiah Quincy brought forth his plan to provide a needed public market at no cost to the taxpayers, using a financing technique borrowed from the private developers. His scheme, which was approved and built in 1825–1826, was to not only build the market building, but to finance it by developing design-covenanted sale lots for two long blocks of stores flanking the market (not to speak of the added jobs and tax base). More importantly, the whole idea was given urbanistic vision in its superb design and siting. Designed by architect Alexander Parris, the project became the centerpiece of the waterfront for the next 30 years, tying India Street with the future Commercial Street in a sweeping strand from which projected the finest architectural array of maritime warehouses ever built—a fitting grand entrance to a city at the time utterly dependent on its waterfront commerce.

The site was created at the waterfront by purchasing several 18th-century wharf properties and filling in the docks to create the building site. Excess land not used for either new streets or the market building itself was sold for private development of the warehouses. The three buildings were sited perpendicular to and upland from the new marginal public way, Commercial Street. The gabled warehouse buildings flanked the central domed and gable pedimented market building on the north and south. The north warehouse contained 23 stores (each about 22 feet wide) while the south warehouse contained 22 stores (each about 23 feet wide). Warehouse lot purchasers were required to build their buildings to Parris' uniform design.



Faneuil Hall Market and Warehouses site plan in relation to old waterfront.

The innovative early Greek Revival buildings (with Federal style overtones) popularized the nascent Granite Commercial style and set an architectural tone that was maintained through successive periods of architectural taste. Parris' chief contribution was the codification of the granite post and lintel commercial facade motif, which he extended through both stories of the market house and all four stories of the warehouse facades (even those openings which are arched are actually cleverly disguised trabeated frames). The granite is the distinctive light grey stone from Chelmsford, Massachusetts, shipped on the Middlesex Canal. The turned columns on the market porticos are 22-foot monolithic shafts, while some individual cut stones are 11 feet long by over 2½ feet wide. Before 1825, the cutting, transportation, and erection of granite of such scale was unprecedented. Also notable is the early use of cast-iron columns in the colonnade inside the market house. The much heralded rehabilitation of the buildings was actually two projects. The first in the early 1970s carried out the careful restoration of the shells of the buildings, while the second, 1975–1978, created the present commercial emporium.



1827 view of Faneuil Hall Market and Warehouses.

19 State Street Block

Commercial and City wharves and the State Street Block together formed a group of architecturally related buildings built in granite in the Renaissance Revival style. Completed in 1858 just as maritime activity was at its apogee, the State Street Block was the last of the great wharf buildings. In the 1860s the decline of the old port began with the transition to maritime railroad decentralization to distant piers, and the achievement of permanent second-place traffic status behind New York. With sites running out, the State Street Block was fitted into the upper part of the slip between Long and Central wharves, which had been filled by 1855, thereby cutting the Custom House off from its location on the water's edge. Designed by Gridley J. F. Bryant, it was probably the most massive structure in the city at the time. The building was originally five stories and roofed with a hipped gambrel to reduce its height because of the building's extreme width. Only six of the building's fifteen original stores remain: the missing being removed for the Central Artery in the early 1950s. As at the Mercantile Wharf Buildings, the demolition scar was left unfinished. Many later roof extensions have altered the roofline, including the two-story mansard crowning the west end.

20 Richards Building

Another of Boston's remaining cast-iron facades is the Richards Building, probably built in 1859 for R.G. Shaw and Company. In the Renaissance Revival style, nearly all of the facade elements of the original building have survived, including the storefront cast-iron framing, although the original bolt-on cast-iron capitals have been removed from all but the bottom floor. The storefront was re-exposed in 1983 after having been covered by a later facade since 1919 (whence the survival of the ground floor capitals). The building was purchased by Calvin A. Richards, whose name the building bears, in 1889. Two stories with a sheet-metal facade were added in 1890 by Richards to the original five stories which previously had a mansard attic. The mansard attic seems to have been a typical feature of Boston cast-iron facade buildings. Others survive on the McLaughlin Building and the Henry F. Miller Piano Forte Company Building at 611 Washington Street.