

the site

natural processes

changes over time

artifacts, layers, traces, and trends

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the once + future city, spring 2006

Julie Proulx

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The Navy Yard in Charlestown, MA has become a real estate hot spot for upper-middle class Bostonians. Separated from the rest of Charlestown by the Tobin Bridge, the wealth of this neighborhood becomes immediately evident. Lavish new apartment buildings, condos, and row houses, designed to emulate the traditional colonial style for which Boston is known, cover the area. Just north of the east-west running Tobin Bridge, two series of low-income, subsidized housing appear. These housing projects are bordered by Charlestown High School and Community Center on the west side, the high school's fields, Barry Playground, and the Little Mystic Channel to the north, Bunker Hill Street to the south, and the Tobin Bridge on the eastern side.

Two blocks southwest from these housing projects, Monument Square, where the Bunker Hill Monument commemorates the United States' victory during the American Revolution, marks the last stop on the Freedom Trail and a major tourist destination. Two blocks southeast beyond the Tobin Bridge, the Charlestown Navy Yard sits with its coveted, high-priced, harbor-view condominiums and town houses. Because of the anomalies created by the close distance between these successful areas and a cluster of housing projects in need of repair, how did this site come to exist as low-income housing? What made this land available for such housing projects? Was it once a neighborhood similar to the area around Monument Square, composed of multifamily houses? Did the topography of Bunker Hill and the harbor influence the area's use as low-income housing?



On site, the different styles of these residential projects evoke different experiences and suggest different construction dates. New Town Development which seems slightly younger than Charlestown Housing displays 1970s modern white-painted wood paneling with large glass windows which encase the common stairways and project from the confining walls of the apartments. Although connected, the staircases and housing units are staggered in relation to one another providing each with a more individual feel (as seen on the map). The white color generates a feeling of elegance and cleanliness despite the trash-strewn streets and over-grown weeded areas between complexes. The New Town Development also borders the Little Mystic Channel which could be considered a "waterfront view" regardless of its unpleasant site of the Mass Port Auto Terminal across the way.

The Charlestown Housing project resembles a more traditional style of low-income housing. The three story buildings, made exclusively of brick, showcase their doorways flush with the front wall of the complex, thus creating a continuous design. Large open spaces separate each complex, attempting to create a front yard feel. Charlestown Housing, located on the southern side of Medford Street and closer to Bunker Hill, is slightly higher in elevation than New Town Development. The higher terrain combined with its traditional style suggests this to be the older of the two housing complexes.

Currently, this area supports exclusively residential uses with the exception of one little corner mart located in the center of the two developments on Medford Street. Due to the lack of use variety within these eight blocks, I speculate that the various institutional and commercial land uses, such as schools, parks, tourist attractions, etc., play an important role to my site.

The Navy Yard, for instance, once one of the nation's primary navel shipbuilding facilities, was in full operation from the Revolutionary War through World War II. I plan on investigating how the presence of a Navy Yard has influenced the development of surrounding communities, targeting these neighboring housing projects. Was the Navy Yard already a separate entity suggested by its surrounding stonewall or did its workers live in these adjacent communities at one time? Perhaps the presence of the shipyard changed the flux and cultures of people moving in and out of this part of Charlestown. Likewise, has the fame of Bunker Hill changed this area throughout the centuries or has it been an insignificant factor due to differing topography? How has the area on which the New Town Developments and Charlestown Housing reside evolved into housing projects because of surrounding land uses?

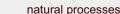
Although a drive through Charlestown typically reveals vacant factory buildings, a functioning power plant, a 1970s style community college, many highway ramps and overpasses, and a community of housing units in need of various repairs, the two primary neighborhoods surrounding the New Town Development and Charlestown Housing projects are well maintained. Noticing these discrepancies, I have become intrigued about the history and development of these housing projects and how they have been influenced by their neighboring areas.

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## **Natural Processes**

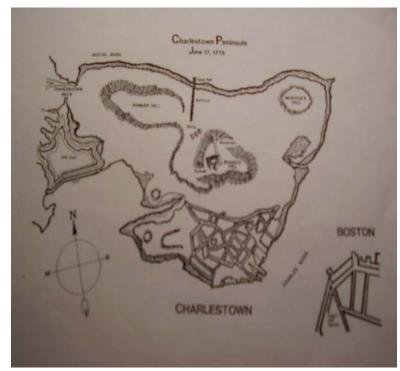
Introduction
Topography
Soil Composition
Pollution and Plant/Animal Life
Air Quality
Climate
Conclusion

#### Introduction

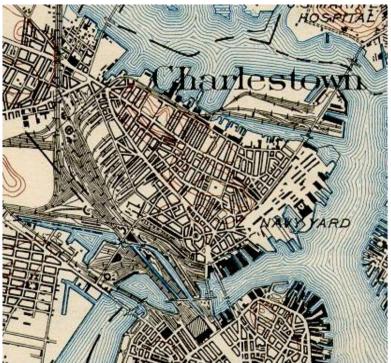
Natural processes significantly contribute to the design and development of land. Thousands of years ago, a combination of earthquakes and glaciers shaped the unadulterated landscape of Charlestown, creating three hills and a jagged shoreline. Because of these hills, Charlestown became an essential defensive strategy for the Americans during the Battle of Bunker Hill in the American Revolution. The jagged coastline developed into one of the nation's primary naval shipbuilding facilities because of the natural coves and connection to Boston Harbor. In addition to using natural processes, inhabitants also change the way they affect a region. The location on which the Charlestown Housing Projects now sit, has endured the influx of people from many different cultures and occupations; this has had a profound effect on the influences of natural processes.

## **Topography**

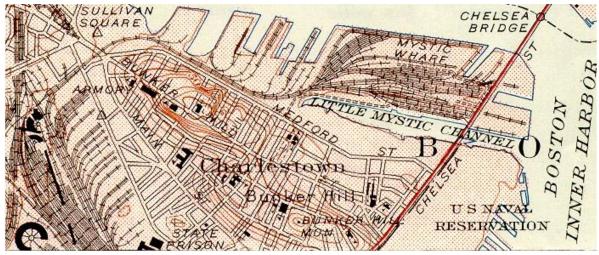
The topography of Charlestown played an important role in its relation to Boston beginning during the Colonialist period. Although a small peninsula, these grounds made way for expansive housing and coastal operations over time. Two of the three original hills, Bunker Hill and Breed's Hill remain today, but Morton's Hill has disappeared. Similar to Beacon Hill in Boston, Morton's Hill was probably leveled to expand Charlestown's land area. The map from the Bunker Hill Monument Information Center (shown below left) demonstrates the size of Charlestown in 1775, prior to the filled land and after major man-made changes to the landscape in 1903, including the Little Mystic Channel and Mystic Wharf located north of the glacier-created Charlestown (shown below right). The 40 year span between the two topographic maps also documents clear changes in the northern coastline due to filled land.



Bunker Hill Monument Information Center March 4, 2006



Historic USGS Maps of New England: Boston, MA Quadrangle (1903); Northeast corner, printed 1942



Historic USGS Maps of New England Boston, MA Quadrangle (1943); Southwest corner, printed 1949

Overlaying the Bunker Hill Monument map with either topographic map shows that Medford Street reflects the same curves found the shoreline of the old Charlestown, suggesting that this street had topographic origins. Medford Street separates Newtowne Development from the Charlestown Housing project. Assuming that Medford Street was once shoreline, Newtowne Development sits solely on landfill. In addition, the photograph of a 1775 Charlestown relief (below left) which captures a view from the north shows a distinct dirt road penetrating the center of the peninsula, transversing the image diagonally from bottom-right to upper-left. The direction and shape of this road resembles Bunker Hill Street, the southern border of my site, highlighted in red on the adjacent map. Since Bunker Hill was the original defense location of the colonists, this path probably provided the most gradual route from the coast in order to bring supplies to the top of the hill. The topography of Charlestown has played a significant role in establishing the two major streets within the Charlestown Housing projects.





Bunker Hill Monument InformationCenter; March 4, 2006

Google Earth; view from the North, 2006

In addition, the topography of the land-filled wharfs which once extended into the Little Mystic Channel along Medford Street reappears in the street pattern found Newtowne Development. An aerial view reveals roadways in the new development dividing the buildings and landscape in a similar blueprint as demonstrated once by the wharfs. Topography has shaped important elements in the current layout of the Charlestown Housing projects both by street layouts and building design.

### **Soil Composition**

Filled land makes up a large portion of Charlestown. To the northern border of Medford Street, as mentioned earlier, landfill was added to the coastline, initially as wharfs. These wharfs housed such companies as F.N. Holmes Furniture Co., Hallowell Granite Co., Berry & Ferguson Drain Pipe Works, and Oriental Coal Oil Works, and several storage facilities for coal and wood, the primary fuels in 1888. The soil composition in Barry Playground most readily demonstrates the existence of the wharfs which have since been replaced with Newtowne Development and high school athletic fields. Barry Playground has existed since the late 1890s as an open space and currently supports two baseball fields and no traditional playground. It borders Medford Street, the Newtowne Developments, Little Mystic Channel, and the Tobin Bridge. When the factories on the wharfs were demolished sometime after the 1940s, the rock and sand of the rubble carried by wind or by foot started mixing with the soil in Barry Playground. This decreased the quality and nutrients of the soil for some plant life and resonates throughout the area by its affect on plant life. The grassy areas in the Charlestown Housing project appear thin and dry, revealing the graininess of the soil beneath it.



The sandy soil composition combined with the lower elevation of Barry Playground and waterfront create difficult environments for tree growth.

The soil and sand mixture composing the baseball diamond also feels damp to the touch. This wetness probably exists because of a high water table level attributed to being filled land. In addition, the street level is higher than the field elevation, causing it to be to closer to sea level. The absence of tall trees appears throughout the shoreline of the Little Mystic Channel most likely

caused by a combination of the sandy soil and the high water table resembling some characteristics of a flood plain. In a flood plain, trees have a difficult time surviving because of the decreased oxygen content and compactness of the soil. This would explain the hardness of the soil on Barry Playground and the increase of trees as the elevation rises away from the water and the soil becomes more oxygenated towards Breed's Hill.

#### Pollution and Plant/Animal Life

In addition to nutrient-rich soil, viable plant life requires adequate water, sunlight, and space both for roots and for branches. Water, radiation, and ground pollution further contribute to the absence of abundant plant life in the Charlestown Housing projects.

The land on which the Charlestown Housing projects reside has always bordered the junction of the Mystic River and Boston Harbor. Boston Harbor became home to the city's sewage during the 1820s. It acted as a natural cleanser flushing the sewage out to sea with the tides. Local factories dumped chemical waste directly into the water and sanitation from local residents also saturated the Charles River and the harbor. Because of Charlestown's coastal position, this water pollution most likely soaked into the land, affecting plant and animal life on shore. The lifespan of urban trees quicken in environments with cramped root systems, high soil densities, sewage, and radiation. With high potential that this region was heavily affected by water pollution, this seems to be a primary cause for the lack of plant growth along the Little Mystic Channel coast.

The nature of the architecture and materialistic design also prevent plant life. The trees, planted after the establishment of the housing developments, have needed to accommodate the light penetration, radiation, and structure. Some trees on the site were planted in locations with inadequate sunlight for plant growth. Typically, the adjacent building will shadow the tree during the afternoon sun, significantly stunting growth. In addition, I estimate about 75% of the Charlestown Housing projects is covered in pavement or brick building with only 25% open space with plant life based on Google Earth satellite images. This creates an environment with high amounts of heat and light radiation, dehydrating the undersides of leaves and eventually causing trees early deaths. Finally, substantial pruning will potentially kill plant growth. Branches on trees around the neighborhood had been removed sometimes exclusively on the portion of the tree facing the building façade. The size of the tree trunk indicates that it did not exist prior to construction of the housing project. If a storm had damaged the branch, the stub would have remained jagged indicating an unclean cut, but the stub shows a smooth separation, again suggesting that the branch was intentionally removed. All in all, the location of plant life reflects adequate natural processes to sustain it. Plant growth has been successful along high school fields on Medford Street and along Breed's Hill where the conditions minimize radiation and water pollution while maximizing sunlight.

Garbage and other ground pollution also discourage plant growth. Oil stains from cars frequently occur along the side of the streets. Trash litters some curbs and blows into yards, collecting on the base of fences. White plastic shopping bags adorn several tree branches. Garbage typically attracts animals. I spent an hour in the area and caught eye of a few birds, a couple dogs, and a few squirrels despite its close location to water. Animal life does not seem to be too vibrant in this area, probably due to the land pollution and lack of shelter—the buildings do not create many dark hiding places for animals. Neighboring areas such as the Navy Yard seem to accommodate animal life more readily. One animal I presume appears frequently around the area is the rat. Food trash scattered around in the streets almost certainly entails the presence of rats.

#### Air Quality

Charlestown suffers from poor air qualities because of the high density of highways. Previously, railways and factories filled the air with added emissions which have primarily been removed from the site. According the Anne Whiston Spirn's The Granite Garden, the three primary sources for air pollution are caused by transportation (55.8%), fuel combustion (22.1%), and industrial processes (14.8%). All three sources appear in adjacent neighborhoods to the Charlestown Housing projects.

Within the housing projects, signs of pollution occur primarily from car emissions. In addition, cars park on both sides of every street. Outside the boundaries of the site, over 75,000 cars cross the Tobin Bridge every day as stated by MassPort in 2000. The immense traffic flow through this region causes carbon dioxide pollution. In addition, the MassPort Auto Terminal, also known as Mystic Wharf, occupies the land opposite the Little Mystic Canal. Aerial views show the parking lot lined with cars (see below). Sanborn and USGS topographic maps from the early 1900s depict this land as a massive freight yard with rail lines terminating throughout the Northeast.



MassPort Auto Terminal across the channel from Newtowne Development depicts a parking lot filled with cars and smoke stacks from a local industrial plant.

Also evident in the photograph above are the smoke stacks dispersing waste gases into the air. Industrial plants line the opposite side of the Mystic River in Chelsea and Everett. The wharfs formerly along Medford Street also hosted a wide variety of manufacturing companies including furniture and oil, both industries known for water and air pollution.

Two noticeable uses of fuel in the form of electricity appear on in the Charlestown Housing projects. First, light pollution floods the neighborhood at night. Street lights appear once every 50 feet and the buildings are adorned with their own lighting system both by the entryways and on the faces of the walls. A second, more individually regulated, expenditure of electricity can be seen in the photograph below. At least seven air conditioners protrude from these windows. Their presence causes further energy inefficiencies with heat and consequently air pollution. Air conditioners left in windows during the winter months leak heat to the outside which requires more energy usage to replenish the heat lost in order to survive the cold temperatures outside.



This photograph was taken during the first week of March, an unnecessary time for an air conditioner.

The openness of the region marks one benefit that this neighborhood has fighting immediate air pollution. The low building heights and the tallness of the Tobin Bridge prevent stagnant air and coastal breezes which provide additional air circulation. Because the Charlestown Housing projects fail to support abundant plant life, natural air filtration produced by the exchange of carbon dioxide for oxygen does not happen as frequently as more densely planted areas, propagating the regional effects of air pollution, contributing to atmospheric damage and global warming.

#### Climate

The Northeast is known for having a temperate climate with four seasons. The temperature varies drastically from single digits with ice and snow during the winter months to sometimes reaching 100 degrees in the summertime. With this weather,

vegetation generally shed their leaves for the harsh winters and regenerate during the spring months. The climate in Charlestown becomes adulterated by the vast expanses of concrete and pavement, shielding the earth from rainwater and radiating heat and light between the brick buildings and the street pavement.



The pavement in the Newtowne housing community is in need of some improvement.

The harsh climate also affects the pavement. The "fatigue cracking" pavement indicates poor drainage. In the picture above, the sidewalk shows cracking and adjacent a signpost displays rust along the bottom portion and rust markings on the sidewalk. These rust stains on the pavement seen in the foreground of the photograph indicate the direction that the snow must melt towards the storm drain in the street. Together these details suggest that rainwater tends to stream into the street through this section of the sidewalk rather than pool directly on the sidewalk above the drain.

#### Conclusion

Natural processes have shaped the current landscape of the Charlestown Housing projects over time. Historical topography established several primary street patterns. Contrarily, plant life uses present natural processes to determine locations suitable for development. A combination of soil composition, water pollution, radiation, and sunlight has determined locations for flourishing plant life while other places display floundering growth. Air pollution continues to rise with the congested roadways and well-traveled Tobin Bridge. From Charlestown's creation by glaciers and earthquakes, natural processes have significantly contribute to the design and development of land.

<sup>&</sup>lt;sup>1</sup> Spirn, Anne Whinston. <u>The Granite Garden</u>. New York: Basic Books, 1984, 14.

<sup>&</sup>lt;sup>2</sup> Sanborn Maps: Boston, Massachusetts; 1888, vol. 5, sheet 167b.

<sup>&</sup>lt;sup>3</sup> Spirn, Anne Whinston. The Granite Garden. New York: Basic Books, 1984, 178.

<sup>&</sup>lt;sup>4</sup> Spirn, Anne Whinston. <u>The Granite Garden</u>. New York: Basic Books, 1984, 44.

<sup>&</sup>lt;sup>5</sup> Massport Pressroom: "Tobin Memorial Bridge Turns 50 Years Old; Historic structure still provides major link in highway system," Feb. 28, 2000.

<sup>&</sup>lt;sup>6</sup> Elkins, James. How to Use Your Eyes. Routledge: New York, 2000, 28.

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Introduction
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#### INTRODUCTION

Technological innovation, national and local policy, economic condition, and social fashion influence the shape of city development and its changes over time. Physical characteristics and land uses, such as the types of housing, businesses, and transportation networks, can indicate the progression of residents and patterns of these trends within an area. In *Crabgrass Frontiers*, Ken Jackson consistently argues that change and development outside of a city's limits is equally important to movement within; the trends and patterns of suburbanization dramatically altered the look, feel, and make-up of the city and surrounding areas. The move to the suburbs during the early 1900s intertwined with the evolution of Charlestown and my site's drastic residential change from three story row houses to public housing complexes. The ever-increasing fashion of suburban life played a significant role in the development of residential society, transportation and street patterns, and industrial trades in Charlestown over the past century.

#### RESIDENCE

Prior to 1875, "a large home on a tiny lot in a densely-settled neighborhood was considered a perfectly appropriate residence for a high-status family." <sup>1</sup> Since that time, society has prioritized private lush green lawns and detached houses above densely populated city life. This shift in ideals appears to have influenced Charlestown's people and housing trends significantly.

The Sanborn Map from 1895 (below) shows the design of residential buildings. The shapes of the apartments are consistent within buildings and similar between buildings.



The plans of the rectangular dwellings on my site closely resemble the single-family row houses lining Breed's Hill; this suggests that my site's history may have included higher-income residents. Each row house has a small backyard which runs along an alley way. Nearly a third of my site consists of housing; an eighth is vacant open land and the remaining serves industrial uses. A large Roman Catholic Church is situated in the neighborhood suggesting that these residents were not ethnic or religious minorities in the Boston context. For such a densely populated area, only one small primary school occupies the seventeen block area which would later be transformed into Charlestown Public Housing. A few bakeries, a laundry place, and a cobbler shop appear along Bunker Hill Street, the street which would separate the housing projects from upscale town houses.

Within approximately seven blocks in 1895, four wagon houses appear with an additional four on an adjacent block. The substantial sizes of these wagon houses, sometimes spanning the area of two flats, allude to the socioeconomic status of the residents or previous residents; these residents were wealthy enough to own horses. The wagon houses may have also been utilized by the industries occupying the wharfs rather than as storage for forms of luxury transportation. As Ken Jackson states the move to the suburbs by 1900 had caused "tenement districts of the poor... along the same streets [where] the well-to-do had lived only two generations earlier." This further suggests that these row houses were once homes to wealthy people.

As compared with the 1888 Sanborn Map which shows almost all single family row houses, fewer single family dwellings and more flats and tenement housing, especially along Chelsea Street, can be seen on the 1895 version—an indication of a rise in low-income residents. In addition, a gas container, twenty feet in height, came to occupy a previously empty private lot less than one block from Medford Street. Perhaps the gas was used in local homes for power, but more likely, this container provided energy for Berry and Ferguson Masons Stock, Etc., the closest company to it along the wharfs. By 1927 (map shown below), this gas holder disappeared as did Berry and Ferguson Masons Stock, Etc. Mystic Playground expanded onto this neighboring land and across Scott Street to cover a former residential block. The tenements and flats, seen in 1895 between Scott Street and Medford Street, seemed to house workers at Berry and Ferguson because when this business closed, the city reclaimed both of these sites. The tenements on the opposite side of Medford Street reverted back to both flats and single family housing, which may have been the consequence of cheaper housing elsewhere.

# 1908 (revised 1927) Sanborn Maps of Charlestown, MA vol.5 sheet 588

To combat the Great Depression which began in 1929, the federal government established the National Industrial Recovery Act during the First Hundred Days of 1933 and the Housing Act of 1937, which focused on creating jobs and housing. By 1941, the United States Housing Authority had initiated over 300 housing projects. Although local city governments funded their respective projects, the federal government provided municipal incentives. Condemning blighted areas appeared to be the easiest route to establishing public housing in order to obtaining these incentives because the city did not need to pay high prices for the land. In addition, the Great Depression probably contributed to the slum-like appearance of these neighborhoods.

The housing projects on my site were constructed around the same time period as these federal acts and perhaps were part of an incentive program similar to those received for the West End's urban renewal. The presence of public housing projects, especially from this era, establishes my site as a low-income or an immigrant, working class community of Boston. By 1940, Sanborn maps indicate that the Boston Housing Authority had cleared the three-story flats and dwellings to construct new subsidized public housing.

With the federal government semblance, especially in the emerging desirable suburbs, qualities of suburban life appear within the newly established housing projects. In addition to the significantly lower concentration of built structure on the land, the incorporation of landscape design and open grassy spaces with plant life suggest that characteristics of suburbs were considered during the construction of these housing projects. Unlike before, the buildings of the Charlestown Public Housing projects were set on large expanses of yard-like areas replacing the row houses' tiny private lots. Consequently, these grand plots obliterated several streets to decongest the area and make the entire housing project more cohesive, resulting in a more spacious, suburban feel.

Similarly, the Newtowne Public Housing project, built by 1962, shares a style resembling the suburbs. Individual units rather than apartments composed this housing project. Perhaps the noticeable staggering of the units was an attempt to simulate detached, single-family housing, one of the top priorities of suburban fashion.

1988 Sanborn Maps of Charlestown, MA vol.5 sheet 586

Newtowne Housing sits on land formerly used by a furniture company, coal sheds, a building veneer factory, and a granite company. The wharfs were filled to create a less jagged coastline, although minor remnants of the original divisions remain visible. The alignment of the housing units also appears to coincide with the shape of the wharfs, rather than the direction of Medford Street, as seen in the Sanborn map above. The land fill used to even the coastline may be less reliable for construction, thus causing these consistent gaps among the buildings of Newtowne Housing. The previous industrial buildings on the wharf sites had been located perpendicularly along the edge of Medford Street and in accordance to the wharf boundaries because of property divisions.

#### TRANSPORTATION AND STREET PLANNING

According to Ken Jackson, the technological evolution of transportation fundamentally facilitated suburbanization. As the modes of transportation changed from carriages, to trains, to automobiles, to buses, etc. people living outside the city could live in their "private wonderland" while quickly and easily commuting to the city for work. The geographical location of Charlestown, between the center city and suburbs, probably played a significant role in the establishment of its tremendous highway systems and rail systems which have dominated much of Charlestown over the past century.

On my site, the steel, two-deck Tobin Bridge provides suburban residents from the north with an easier and faster commute to the center city. Sanborn maps indicate that the bridge was constructed by 1940. This massive undertaking reflected the increasing presence of the automobile. The Tobin Bridge replaced the Chelsea Bridge which appeared on maps by 1875, and required the residential blocks between Decatur and Chelsea streets to be permanently cleared. Unlike the old bridge, the Tobin is not a continuation of Chelsea Street and spans directly above these blocks. Demolition of these neighborhoods and the establishment of this immense bridge further suggest my site to be once one of low-income and/or immigrant residents.

When Charlestown Housing was established, the roadways also changed. Some streets became building sites while others were redirected, but all of them became more regularized in an easy to navigate, grid-like pattern. The streets on my site in 1988 appear to coincide with the property boundaries of 1888 as shown below. Here again, redefining these street patterns may be the result of the suburban craze in American society to escape the dense, congested feeling of the city.

1988 Sanborn Maps of Charlestown, MA vol.5 sheet 586 1888 Sanborn Maps of Charlestown, MA vol.5 sheet 167b

#### **INDUSTRY**

The prominent presence of the Navy Yard in Charlestown reflects on the prosperity of Boston as a port. Being surrounded almost completely by water, the Boston coastline must have been littered with wharfs, yet discrepancies in topographical maps of the Charlestown area show more wharfs, the ones on my site, being established between the 1850s and 1880s.<sup>5</sup>

Since 1888, occupancy of these wharfs has varied according to the needs of the time. For instance, the coal business took over a neighboring wharf used by a granite company in the 1920s. The expansion of the coal industry in this region indicated the extensive railway use in the area (see below).

Historic USGS Maps of New England Boston, MA Quadrangle (1943); Southwest corner, printed 1949

Mystic Wharf, a man-made peninsula across the Little Mystic Channel, became an engine house for the rail travel to and from Maine in the 1880s which connected Boston to the north<sup>6</sup> and "soon became one of the major shipping terminals in the harbor." The widespread use of coal-fueled railway systems during the turn of the century probably caused the growth of Glendale Coal Co.

Similarly, Palmer & Parker Co. manufacturing lumber and veneers expand their business to fill over three wharfs vacated by other industries during a 40 year span. This growth also indicated an increasing need for these products probably because of their role in suburban home construction.

The demolition of the Palmer & Parker, Co. and Glendale Coal Co. between 1940 and 1962 could have been the result of declining business. Changing forms of transportation and energy may have closed the coal company. More likely, these companies relocated to less expensive properties. In *Crabgrass Frontier*, Ken Jackson suggests that relocation of industries was a consequence of the invention of the truck in 1909. Trucks meant that factories and industries could move to cheaper locations further inland than center city. Perhaps the invention of the truck is what caused the prosperity of the wharfs to fade over time.

#### CONCLUSION

In conclusion, the move of people to the suburbs left Charlestown a changed community. As wealthy residents moved from their previously fashionable row houses, these vacant buildings became affordable housing to immigrant and low-income populations. The development of the wharfs and their industrial occupants reflected this move as well. Boston became able to accommodate more industry because of vacant lots and new wharfs, such as Mystic Wharfs on my site, were constructed to house the factories. The railroad system and improved routes for transportation to the suburbs also changed the appearance of Charlestown. "As [the commuting railroads] concentrated industry at the rail junctions in the cities, they blighted nearby neighborhoods with factories and switching yards...." Suburbanization affected the socioeconomic composition of Charlestown, making it a prime candidate for urban renewal. The public housing projects which appeared in the 1940s directly coincided with the incentive programs and characteristics for redevelopment established by the federal government. Suburbanization affected Charlestown directly and shaped the site into what we see today. The changing the socioeconomic status of its residents and altering landscape patterns, architectural designs, modes of transportation, and industries, which have come and gone throughout the past century, all contributed to my site's current appearance and social status.

<sup>&</sup>lt;sup>1</sup> Jackson, Ken. Crabgrass Frontier: The Suburbanization of the United States. London: Oxford University Press, 1985, 55.

<sup>&</sup>lt;sup>2</sup> Jackson, 137.

<sup>&</sup>lt;sup>3</sup> Jackson, 224.

<sup>&</sup>lt;sup>4</sup> Jackson, 55.

<sup>&</sup>lt;sup>5</sup> Mapping Boston. ed. Alex Krieger, David Cobb, and Amy Turner. Cambridge, MA: MIT Press, 1999, 17.

<sup>&</sup>lt;sup>6</sup> Mapping Boston, 122.

<sup>&</sup>lt;sup>7</sup> Mapping Boston, 131

<sup>&</sup>lt;sup>8</sup> Jackson, 184.

<sup>&</sup>lt;sup>9</sup> Jackson, 102.

<sup>&</sup>lt;sup>10</sup> Jackson, 137.

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Artifacts of the Glendale Coal Company
Artifacts of Residential Blocks before the Housing Projects
Layers of History Evident through the Tobin Bridge
Trends in Mystic Playground
Conclusion and Predictions for the Future

#### INTRODUCTION

The city constantly changes. With every decision to move into the city or move out of the city, with the development of new technologies, or the decision to plant a tree, the city changes slightly. Economics, politics, natural processes, and especially people create the life of a city and make it different from day to day; however, remnants of the past linger and clue observers to the site's history and former uses. Over the past 100 years, the portion of Charlestown Housing Projects and Newtowne Developments on my site has been reduced to five blocks from nine in 1888. Although streets may have been obliterated and houses demolished, evidence of the past continues to remind us of the presence of the wharfs and of the former land uses.

#### ARTIFACTS OF THE WHARFS

Photographs revealing clear evidence of the former wharfs.

Artifacts of the wharfs prominently appear along the waterfront. Taken during low tide, these photographs clearly depict the filled land and docking areas for several of the wharfs. The picture on the left shows the protruding edge of the wharf once occupied by the Glendale Coal Company which also appears in the photograph on the right, showing the view from across Mystic Channel. The picture in the center displays a loading ramp remnant of Berry & Ferguson Masons, Stock, Etc. which was the last industry to inhabit the site during the late 1890s before being replaced by Mystic Playground around 1927.

The footprint made by Newtowne Housing also incorporates the history of the site into its design as shown below. Whether these breaks commemorate the former wharfs by fitting around their original formation or whether slight changes in elevation or unstable filled land of the former inlet prevent a continuous building, their presence marks a trace of this former industrial docking area.

The buildup on the walls containing the filled land also may exhibit layers of history regarding the water composition. The stratification on the rocks indicates varieties of sediments and may also have retained the waste from the products used and created on the wharfs.

1929 (revised 1940) Sanborn Maps of Charlestown, MA vol.5 sheet 586.

1962 Sanborn Maps of Charlestown, MA vol.5 sheet 586.

The deviations found when comparing Sanborn maps dating back to 1888 with observations from present day suggest many artifacts from the Glendale Coal Company. The photograph below, taken on the former property of Glendale Coal Company, shows a small patch of grass in the foreground. This square artifact is actually composed of four stone squares, each with the pattern of a grate, through which the grass grows. Overlaying Sanborn maps marks this artifact as one of four anchor locations for two moveable hoist towers used to load or unload coal shipments from cargo ships in the channel. Another artifact providing further evidence of the site's previous use as a wharf can be observed in the change of fence type. This chain-link fence, flanked by rot-iron fencing, distinguishes this area for use as a dock or specific loading area when Glendale Coal Co. occupied the wharf. No other breaks in the rot-iron fence appear on my site.
The grassy patch in the foreground and the chain-link fence provide evidence of the Glendale Coal Company.
In the photograph below, several brick foundations stand independently from existing structures with no evident purpose to the community. These artifacts are similarly shaped to the screening house, coal bin, and coal shed displayed on the 1940 Sanborn map (see below in red). Although these storage areas are in slightly different configurations, this coal company occupied the wharf until Newtowne Housing Development replaced the site and most likely altered the design and location of their buildings to accommodate a higher demand for coal with the increased usage of rail lines.
Photograph depicting artifacts of the Glendale Coal Company which occupied this site from the early 1900s through the 1940s.



1929 (revised 1940) Sanborn Maps of Charlestown, MA vol.5 sheet 586.

Artifacts of the boundary lines between Glendale Coal Co. and Mystic Playground

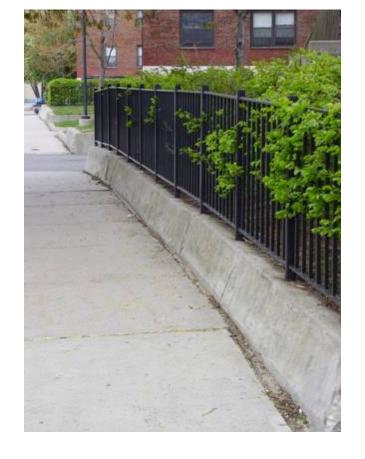
In addition, a very low stone wall (indicated in pink) separates Glendale Coal Co. from Mystic Playground on the above 1940 Sanborn map. This low wall could have been part of a foundation for a taller wall or even storage structure following the 1940s, serving as a physical boundary and barrier from the Edmonds Wharf, occupied by Mystic Playground. Artifacts of Glendale Coal Company appear frequently throughout the area where it formerly resided and remind observers of the presence of these wharf industries.

## Artifacts of Residential Blocks before the Housing Projects

Overall, minor changes have occurred on my five block site between the late 19<sup>th</sup> century and the 1930s. Suddenly in the 1940s, political and social fashions cleared the residential areas and established the Charlestown Housing and Newtowne Development Projects, leaving behind subtle reminders of the past. Along the sidewalks on the Charlestown Housing side of Medford Street, raised curbs appear, sometimes separating the lawn from the sidewalk and other times cutting directly through the grass (see below). When compared with Sanborn maps, the shape and size of these anomalies generally match the locations of former dwellings. Although the artifacts only occur along Medford Street, these raised curb areas seem to be indicative of previous foundations.

The raised curb follows the foundation of previous dwellings.





## Layers of History Evident through the Tobin Bridge

Because my site consists of two public housing projects, the Boston Redevelopment Authority has specific regulations regarding changes to any of the building structures. Therefore, layers denoting changes over time are primarily evident through non-residential artifacts, such as the Tobin Bridge. Currently, the Tobin Bridge is undergoing major updates and repairs to its support system and rusty appearance (see below).

Updates to the Tobin Bridge indicate its heavy usage.

The need for these repairs suggests the immense usage of the bridge since its construction around 1940. With the availability of stronger building materials and new techniques for support, the existing truss system, representative of an earlier style of engineering, is no longer required, thus creating new open zones of land beneath the bridge. Perhaps these new supports will promote alternative land uses for this area, presently adorned with sparse landscaping.

## Trends in Mystic Playground

As early as 1895, the Public Playground later named Mystic Playground appears on Sanborn maps. Minor changes in the location of the field house appeared over time, but the land's use as a playground has remained constant. Before the playground, this land housed the Oriental Coal Oil Works and Berry and Ferguson Drain Pipe Works. Part of the playground's property was formerly occupied by two to three story housing units, similar to the residencies across Medford Street. The persistence of the playground could be due to the natural processes. This area seems to have a particularly high water table, causing difficulty with permanent construction. Perhaps this explains the continuous

changes in the location of the field house.

By 1927, Mystic Playground acquired concrete bleachers of substantial size in the corner along Medford and Chelsea streets and a "shelter" on northwest side of the field. The next change occurred around 1940 when a locker building was added and the bleachers were removed; these alterations seem to correspond with the building of the Charlestown Housing Project as a more suburbanized playing field. By 1962, the shelter and lockers were replaced by a large field house which was positioned closer to the perimeter of the property with better access to the street. This change appeared around the same time at when the Newtowne Housing Development was established; their similar shape even suggests construction by the same company. All Sanborn maps following 1962 show an absence of built structures on the field, probably indicating decreased usage. The "unpopularity" of Mystic Playground may be the result of an increased variety of fields on the opposite side of Newtowne Developments, near the high school. The lack of activity may also be due to the playgrounds non-central location and boundaries; three sides are either roads or water and a perimeter fence restricts access to Medford Street. Jacobs states that "parks [naturally] tend to run the extremes

of popularity and unpopularity."

At this time Mystic Playground appeared to be a prominent part of the neighborhood.

Throughout the coming and going of industries on the wharfs and the construction of these housing projects, Mystic Playground perseveres relatively unchanged. The primary differences appear in the expansion of the playground due to the closure of the wharfs; however, "neighborhood parks themselves are directly and drastically affected by the ways

the neighborhood acts upon them." The additions and changes made to structures within the boundaries of Mystic Playground suggest that its expansion was not only based on the availability of adjacent land, but also on its popularity amongst the local residents.

The Boston Braves had been the local team since 1876, and in 1901 the Boston Red Sox began to play. With these two competitive baseball teams playing for Boston into the 1950s, baseball must have been a popular local sport. Perhaps the ever-present talk of baseball brought about the early establishment of Mystic Playground relative to other parks or playgrounds in the country and caused its landscape to change and improve so frequently. Today, the two baseball fields which occupy Mystic Playground continue to look well-groomed and ready for play, complete with florescent lights to illuminate the field for night games.

#### Conclusion and Predictions for the Future

The Charlestown Housing Project and the Newtowne Housing Development were both converted into residences of suburban styles. Jane Jacobs, in her book *Death and Life of Great American Cities*, discusses the rise and fall of cities based on movement of people, economic, and political influences. Applied to my site in Charlestown, Jacob's argument about the role of sidewalks in stimulating community plays a significant factor in the development the housing projects. I speculate that the sidewalks lining every street only became utilized many years following construction because of the unsafe reputation Charlestown had assumed. Now, however, I observe a neighborhood coming to life with kids walking home from school, children playing ball with their mothers, and neighbors conversing on front lawn areas. This interaction reflects and encourages a sense of community. According to Professor Anne W. Spirn, being a member of a

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community instills a sense of responsibility for the immediate environment and respect for its buildings. 
This can only

further generate "life" and longevity amongst the neighborhood.

One aspect of a successful urban development Jacobs stresses is diversity—diversity in land uses and in people. Walking through my site, I was surprised by the diversity evident through a brief visit. Hispanic, Asian, White, and Black people strolled on the sidewalks. Although the scope of land uses within my site are limited, assessing the entirety of the housing projects, several schools, a church, a market, residences, playgrounds and athletic fields, and a fire station reside within the boundaries of the projects. The small size of Charlestown also makes accessing downtown fairly easy which incorporates many more land uses.

One potentially disastrous obstacle which will face this community relates to the rising prices of gasoline. The closest T station, Bunker Hill Community College on the Orange Line, is nearly one mile away and not known for its safety. In addition, public bus routes do not seem to run through the area; however, a MBTA water shuttle boat runs every half hour between the Navy Yard in Charlestown across the harbor to Long Wharf in Boston. Jacobs proposes that the

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impracticality of transportation will drive people away from an area. With the gas prices reaching all time highs with no indication of lowering, the cost of transportation may leave the Charlestown Housing and Newtowne Development Projects vacant. Redirecting a public bus to accommodate these Charlestown residents would help alleviate financial pressure and enable them to continue to build a stronger community.

View of Charlestown Housing and Newtowne Development Projects from the Bunker Hill Monument atop Breed's Hill.

Jacobs, Jan

Jacobs, Jane. The Death and Life of Great American Cities. New York: Random House, Inc., 1961, 89.

Jacobs, 95.

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[3]

Spirn, Anne Whiston. The Once and Future City: Lecture on the West Philadelphia Landscape Project, April 26, 2006.

Jacobs, 356.