



# ARCHAEOLOGICAL AND HISTORICAL SENSITIVITY EVALUATION FOR THE PROPOSED HENDRICKSON STREET REZONING BOROUGH OF BROOKLYN KINGS COUNTY, NEW YORK

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ENVIRONMENTAL REVIEW

MAR 30 1994

LANDMARKS PRESERVATION

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March 1994



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# LIST OF PERSONNEL

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## INTRODUCTION

During February 1994 Greenhouse Consultants Incorporated conducted an archaeological and historical sensitivity evaluation of the Hendrickson Street parcel in Brooklyn, Kings County, New York. The parcel includes all of Lots 26, 31, 51, 55, 57 and 59 as well as parts of Lots 10, 32 and 50; all on Block 8558. The term "Project Area" is used hereafter to refer to this parcel. The purpose of this research was to initially assess the prehistoric and historic potential of the project area. This evaluation utilized archival literature and maps and included a visual inspection of the project area. The documentary research was carried out at the Brooklyn Library; SUNY at Stony Brook Library; New York Public Library; North Babylon Public Library; New York City Department of General Services, Subsurface Exploration Section, and the Topographical Bureau of Brooklyn. Special sources consulted include the New York State Historic Preservation Office and the New York State Museum.

The research was conducted for the firm of McKeown & Franz Incorporated of New York, New York.

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# GEOGRAPHY AND PHYSICAL SETTING

The project area is located in the southeast section of New York State on the western part of Long Island and in the southern part of Kings County (Figure 1). This portion of New York lies in the inner part of the Atlantic Coastal Plains Province (Fuller 1914: 1). The basal deposits are of Cretaceous age and are overlaid by glacial drift (Fuller 1981: 1; Broughton 1981: 35). This region of the county lies in a glacial outwash plain south of the Ronkonkoma Moraine created during the Wisconsin period (Van Diver 1985: 70; Fuller 1918: 1).

The soil in this region of Long Island had originally consisted of a foot or more of brownish sandy or pebbly loam and clayey sand overlying a fine sand (Fuller 1914; Gimigliano and Church 1980: 8). Early colonists noted the soil to have been a light sandy loam free of rocks (Thompson 1962: 144).

West of Islip, including the project area, the slope is very gentle, 10 to 20 feet rise in elevation per mile, a condition favorable for marsh growth (Fuller 1918: 184). The presence of large barrier beaches to the south cut off the open sea and assisted in the formation of marshes (Gimigliano and Church 1980: 9). These salt water marshes,

begin to form whenever the water is shallow enough for eel grass to obtain a foothold, usually a foot or two below low-water mark, and where no strong currents are flowing. The dead grass and fine silt entangled with it gradually accumulate until the ground rises well above low-water mark and marsh grass takes root upon it. The upbuilding continues until the marsh reaches a level covered only by occasional high tides (Fuller 1918: 184-185).

Due to rising sea levels, vast areas of what was once coastal Long Island now lay submerged. The marshes of Long Island's south shores have kept pace with rising sea levels, growing higher in elevation as the waters rose (Salwen 1982; Rutsch *et al.* 1985: 10).

There is no soil survey for this part of Long Island, however, a soil boring located within the project area indicates that the project area to have been situated in what was once a marsh. The stratigraphy from the boring shows four feet of fill overlying 2.2 feet of dark, gray organic silt with trace vegetation. This overlies brown sand, trace silt and trace gravel (Subsurface Exploration Section 1974). Early historic maps also confirm that marshes previously existed where the project area is currently situated (see Figures 3-5). Bedrock in this area is at least 400 feet below the surface (Michael Greenman, personal communication, 1994).

The project area is approximately 200 feet by 200 feet in size and is situated between Hendrickson Avenue and Coleman Avenue, from 160 to 184 feet south of Avenue U. A site

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Figure 1

Project area location shown on portion of U.S.G.S. 7.5 minute series, Coney Island, New York-New Jersey quadrangle, 1966, photorevised 1979.

inspection revealed that the project area is relatively level and contains no standing structures. At the time of this inspection the parking lot that makes up the project area was snow-covered.

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# PREHISTORIC SENSITIVITY

As part of the project evaluation process, this sensitivity study has surveyed published and unpublished sources in the files of the New York State Museum Division of Historical and Anthropological Services, and the New York State Office of Parks, Recreation and Historical Preservation as well as resources on file at Greenhouse Consultants.

Table 1 presents the results of our search for prehistoric sites in the vicinity of the Hendrickson Street Rezoning project area. Included in the table are three sites located two miles or less from the project area. The locations of these sites are presented on Figure 2 with letter code identifiers which correspond to those in Table 1.

Two of these prehistoric sites are known primarily through the work of Arthur C. Parker, the former New York State Archaeologist during the first quart of this century. Parker describes the sites as shell middens and a burial site. The nearest site to the project area, designated "A" in Table 1 and Figure 2, is one of these. Parker describes this site as a burial place with deep beds of oyster shells, over a dozen skeletons, and pottery (Parker 1922: 582). The date range for this site must include the Woodland period due to the presence of pottery. Parker notes that this site was discovered during 1897 and reported on in 1898 (ibid.). The site was found as a result of the construction of Avenue U (Lopez and Wisniewski 1978: 209). This site location includes the project area. It appears probable that the site is part of the extensive Ryders Pond Site described below.

The second nearest prehistoric site to the project area is the Ryders Pond Site, designated "B" in Table 1 and Figure 2. This known site lies 0.6 miles southwest of the project area. The Ryders Pond site was an extensive site located between Avenue R at 32nd Street and Avenue W (Whitney Street) at Stuart Street (Lopez and Wisniewski 1978: 209). The site lies along a stream. The Dutch called the stream Strome Kill and it later became known as Ryders Pond. It also exists on late nineteenth century and twentieth century maps as Gerritsens (or Garritsons or Garritsons Mill) Creek and more recently, Basin. The site has since been buried or destroyed by the building of the Brooklyn Marine Park (Lopez and Wisniewski 1978: 209; Figure 1). Although it was multi-component, ranging from Archaic through Contact, the site was largely Woodland Period. Most artifacts were attributed to the Clasons Point focus, East River aspect, which correlated to the late Owasco-Iroquois period in central and southern New York State (Lopez and Wisniewski 1978: 209-210). A sandy beach existed at a promontory near Avenue T with salt marshes on either side of the pond. It was on the sandy stretch of the west bank and the broad flat area behind it that contained the heaviest evidence of occupation (Lopez and Wisniewski 1978: 209). Ritchie (1980: 169) notes that occupation on the west bank of streams to be a settlement pattern seen across Long Island. Lopez and Wisniewski (1978: 242) mention that the Ryders Pond site to be the only comprehensive prehistoric site in Kings County.

The third prehistoric site found during this search was also reported by Parker. The Bergen Island Site, designated "C" in Table 1 and Figure 2, is located approximately 0.9 miles east of the project area. Parker describes this site only as immense shell heaps (Parker 1922: 582). Since no artifacts are described, no date range can be estimated.

The Canarsie tribe were the most powerful on Long Island during the Contact Period and held most of Brooklyn from Jamaica, Queens to the southern tip of Manhattan as their territory (Lopez and Wisniewski 1978: 210). Canarsie means "fenced placed" called so because it was located at or in the vicinity of the boundary which divided the lands from the colonists (Lopez and Wisniewski 1978: 210). Their main village and planting grounds extended from Canarsie Beach to Avenue J where it centered on 92nd Street (Lopez and Wisniewski 1978: 210). Early explorers note that the Canarsie had good stores of corn and currants (Furman 1875: 17). By 1832 the Canarsie tribe was supposed to have completely perished (Lopez and Wisniewski 1978: 211).

The Ryders Pond site may represent a second Canarsie village (Bolton 1975: 50). This section of Flatlands was reported by early settlers to have contained extensive plains or fields. The light sandy loam was reported to have been very fertile and good for raising tobacco (Stiles 1884: 65; Thompson 1962: 129, 144). These fields seem likely to have been the former planting grounds of the Canarsie associated with the Ryders Pond site.

There was a known Native American footpath that passed through Flatlands, extending from the Fulton Ferry to Bergen Island (Stiles 1884: 65). This path was at least 0.7 miles away from the project area to the north and west.

In 1679 two Dutch travelers, Dankers and Sluyter describe a longhouse used by native inhabitants in nearby New Utrecht: "it was 60 feet by 15 feet, the frame, rough posts and poles, and covered with reeds and bark" (Stiles 1884: 64). It had a smoke hole on top and an earthen floor and held six to eight families. It had a narrow door at each end.

In terms of potential prehistoric sensitivity, the project impact area was evaluated from two points of view:

- the proximity of known prehistoric sites in or near the project area; and
- the presence of fresh water drainage courses in general, and particularly the identification of river or stream confluence situations



where two or more drainages come together, providing access to both water and food supplies of both systems.

This survey has documented the recorded or published location of two or three sites within a two mile radius of the Hendrickson Street Rezoning project area. Sites have been identified in the general region of the proposed project impact area, including one that includes the project area itself. The stream that feeds Ryders Pond, known as Gerritsen Creek, is situated approximately 0.5 miles southwest of the project area. This steam could have served as a source of fresh water.

As previously mentioned, the project area seems to have been located on the edge of a marsh. Early historic maps (see Figures 3-5) show the project area situated immediately adjacent to what used to be a small neck of dry, firm ground surrounded by marsh. Extensive salt water marshes had once existed along the south shores of Long Island.

Marshes were an attractive resource for native inhabitants. Some of the largest shell mounds reported on Long Island come from the south shore, particularly between Jamaica Bay and Islip, where the 20 foot contour line is one to two miles from the shore (Wyatt 1976:15; Fuller 1914: 184). Immense shell heaps at Canarsie or Flatlands and nearby Bergen Island had been reported (Parker 1922: 582). The food represented by the shell remains could have been eaten by the local tribes or traded as surplus to interior tribes. The sites located within these marshes seem to be strictly food processing sites. The associated campsites and villages were often located on the nearest high and dry areas, including the "necks."

The existence of this land with easy access to fresh water within the project area, combined with the knowledge of the prehistoric sites in the vicinity as well as Contact Period references to occupation in this region, indicates that the project area may preserve evidence of prehistoric occupation.

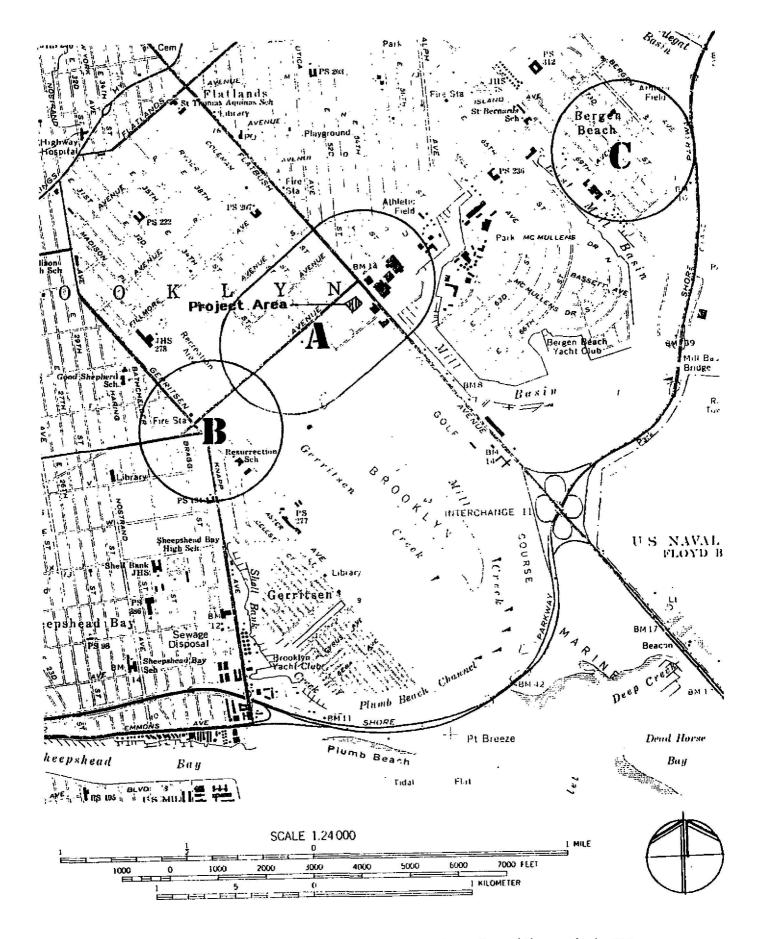


Figure 2 Prehistoric sites within a 2 mile radius of the project area.

# TABLE 1 Prehistoric Sites in the Vicinity of the Hendrickson Street Project Area

| SITE NAME  | NYSM# | PARKER#     | OTHER# | REFERENCE       | PERIOD(S)                      | DESCRIPTION                           |
|--|-------|-------------|--------|-----------------|--------------------------------|---------------------------------------|
| Α.   | 3608  | ACP-KNGS-4  |        | Parker 1922:582 | Woodland                       | Burials<br>Shell middens<br>w/pottery |
| B. Ryders Pond,<br>also Gerritsen<br>Basin or Strome<br>Kill | 7459  |             | BRK1-3 |                 | Atchaic<br>Woodland<br>Contact |                                       |
| C. Bergen Island   | 7391  | ACP-KNGS-3B |        | Parker 1922:582 |                                | Shell middens                         |

## HISTORIC SENSITIVITY

The original Dutch name for Flatlands was Achtervelt which meant "after or beyond the field" (Stiles 1884: 64; Thompson 1962: 128). Later the name was changed to New Amersfort, and finally Flatlands. The first known settlement on Long Island is said to be in Flatlands. In 1636 or 1637 Wolfert Gerretse Van Kouwenhoven and Andries Huddie jointly purchased a tract of land of about 3600 acres from the native inhabitants. Kouwenhoven immediately built a dwelling and laid out a plantation. The plantation was called Achtervelt from whence the new town received its name. It was located at Kings Highway near Flat bush Avenue close to the J.B. Hendrickson & Son store (Thompson 1962: 128-129; Stiles 1884: 64-65).

The native inhabitants had a custom of sharing or renting their traditional territory to other Native Americans and to European settlers. Because of the original inhabitants migratory settlement patterns, colonists were able to appropriate farm land during the season or year that the travel people were away. The distinction between buying ,renting or borrowing probably became blurred as the Euro-American population outstripped the native population Cammisa (1984: 75). The readily visible and available prairies or open plains doubtless accounted for the early development of the area (Stiles 1884: 65). As previously mentioned, these were probably former Canarsie planting grounds associated with the Contact Period component of the Ryder Pond site.

The quality of dwellings of the new settlers seem to have varied. Gerritson, who seems to have shortened his name from Gerritse Van Kouwenhoven, had a plantation with the following structures: a house, 26 feet by 22 feet by 40 feet deep and planked, with two lofts; a barn, 40 feet by 18 feet by 24 feet deep; and a bergh (shelter for hay or fodder), 40 feet long. The entire composition was surrounded by a palisade. On the other hand, some of the obviously poorer settlers had dwellings consisting of huts of saplings covered with bark (Anonymous n.d.: 6-7). The poorer types of dwellings seem to resemble those of the original inhabitants.

The territory was divided by land use into salt meadows, plains and forests. The forests were reported to have been dense and utilized by the native inhabitants. The fields lay adjacent to the salt meadows. Salt hay from the salt meadows provided food for cattle. The marshes were also ditched, probably for irrigation and dikes were built along main lines dividing farmland. The use of ditches and dikes was not unlike the methods used by the Dutch in the Netherlands as was the use of salt hay for cattle (Stiles 1884: 65, 70; Gimigliano and Church 1980: 24). The fields were used as farmland while the forests would have provided wood for fuel and construction material for the colonists.

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The first church in Flatlands was Dutch Reform (Stiles 1884: 73; Thompson 1962: 142; Furman 1875: 103). Stiles (1884: 73) and Thompson (1962: 142) note the date of the church buildings' construction as 1662 while Furman (1875: 103) lists it as 1655. Furman describes the built church as 60 feet by 28 feet by 14 feet high below the beam at the cost of 4,637 guilders. Stiles mentions (1884: 73) that the church was built over an Indian burial ground.

Tobacco may have been grown in Flatlands (Thompson 1962: 129). It is mentioned that in 1706 African Americans had increased in numbers so much that they became dangerous to the town and that civil power was brought in to curtail hostilities (Thompson 1962: 139). White apprentices were also considered slaves of another kind (Furman 1875: 221). Furman (1875: 221) describes the cost of buying black slaves: "a negroe wench and child sold for 60 pounds in 1719 in Brooklyn while 5 milch cows, 15 calves, 3 young bulls and 2 heifers" all sold for 20 pounds. In 1755 there were twenty families in town that owned slaves (Stiles 1884: 69).

During the American Revolution, 1776 through 1783, Kings County was the scene of only one important military operation. The battle of Long Island took place between Wallabout Bay and Gowanus Bay (Roberts 1991: 4). No military action seems to have occurred near the project area.

Flatlands seemed to develop at a slower pace than its neighboring communities. By 1836 Flatlands contained once church, two stores, one tavern and fourteen dwellings. This settlement is noticeably smaller than surrounding villages. The population in the town between 1822 to 1835 ranges between 500 to 700 (Gimigliano and Church 1980: 25).

England had taken possession of Brooklyn from the Dutch by 1664 (Stiles 1884: 70). Flat lands was recognized as a Town by the State of New York in 1788 and became part of the City of Brooklyn in 1896 (Thompson 1962: 146; Stiles 1884: 68, 70).

A search was made for historic sites within or near the project area. The New York State Office of Historic Preservation has listed eight known historic sites within a two mile radius. They are:

| # 4 0 4 7 01 000117 | Bennett House Site                 |
|---------------------|------------------------------------|
| #AU4/01.00011/      | Bergen House Site                  |
| #AO4701.000119      | Culturale Creake House & Mill Site |
| HA O 4701 000100    | SUBLICK-CLOOKE LIOUSE OF MILL SILE |
| # A C 4701 000101   | JULIT LIGEN HOUSE SHE              |
| UL O ATOL 000100    | Genisen Fiornesieuu u min site     |
| #A04/01.000122      | Van Wicklen Cottage & Mill Site    |
| #AO4701.000123      | Van Wicklen Cottage & Mill Site    |
| 10100010F           | NIN S DUVVIEW I 1005C SILC         |
| #404701 000126      | Voorhees House Site                |
| #404/01.000120      |                                    |

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The closest of these sites are the Voorhees House Site, approximately ¼ mile to the south of the project area, and the Gerritsen's Homestead and Mill Site, approximately ¾ mile southwest of the project area. No historic sites are listed within the project area.

A series of nineteenth and early twentieth century maps were examined to determine whether any structures or other features were present within the project area. These maps depict the region from 1835 through 1950.

The 1835 Coast Survey map shows two structures nearby the project area, one just to the southwest and the other to the west. No structures are found on the project area, however which lies in the marsh just beyond firm ground. See Figure 3.

The 1873 Beers map shows three additional roads in the vicinity of the project area. The original road from the 1835 map has been straightened. The structure closest to the project area belongs to A. Coleman. Two other structures belonging to W. Hoofmire and T. Chadwick are also nearby. See Figure 4.

The 1897 United States Geological Survey map shows about eight more structures in the immediate vicinity of the project area, all along the coast, just before the edge of the marsh. See Figure 5.

The 1907 Sanborn map shows no structures on the project area. It does show the estimated extent of original marsh/shoreline covering the southeast section of the project area. However, this estimation does not agree with our measurements on current and historic maps which show the project area to lie totally within the original marsh. See Figure 6.

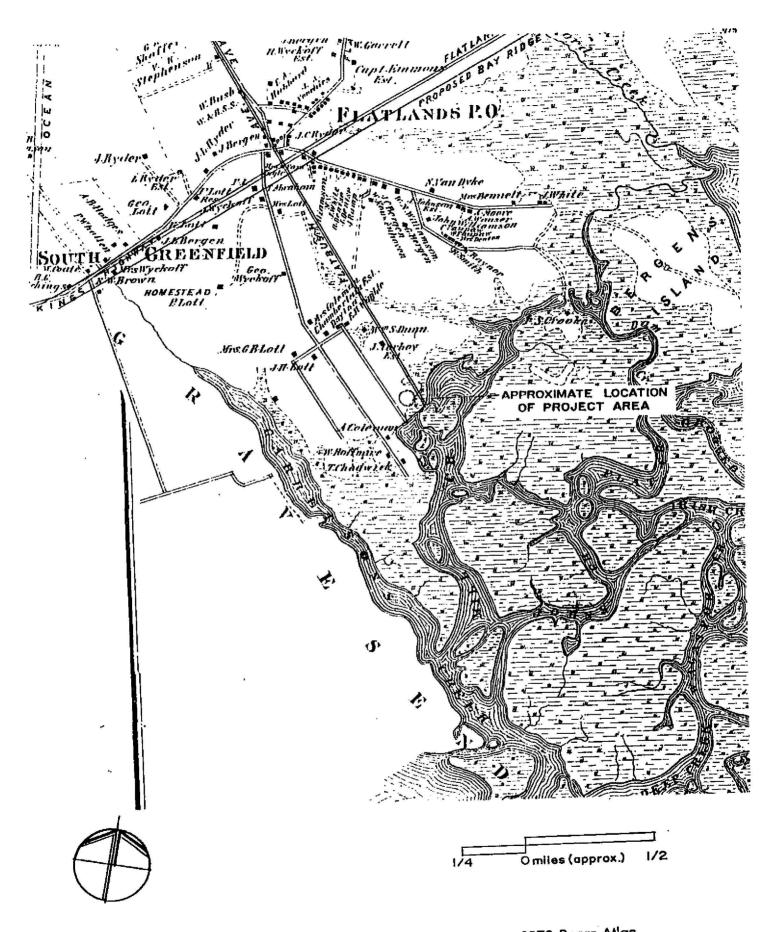
The 1909 Hyde map shows the addition of a street system paralleling today's system. This map does not depict any structures, however, Garretsons Creek is now called Gerritsens Mill Pond and is channelled. The project area is now shown to lie on solid ground that has obviously been filled in. See Figure 7.

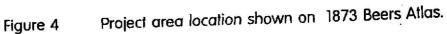
The 1929 Hyde map shows the project area divided into Lots 50, 55, 57, 59, and 61 on the Hendrickson Street side and Lots 22, 24, 26, 28 and 30 on the Coleman Street side. Structures are now shown on the lot. They consist of two one-story buildings and what appears to be two sheds. See Figure 8.

The 1950 Sanborn map shows 1929 structures still in place. In addition, it shows a contractors storage location and the addition of a one story office building (probably a trailer) and another probable shed. The estimated marsh line is still shown. See Figure 9.



Figure 3 From the 1835 U.S. Coast Survey of the South Shore of Long Island.





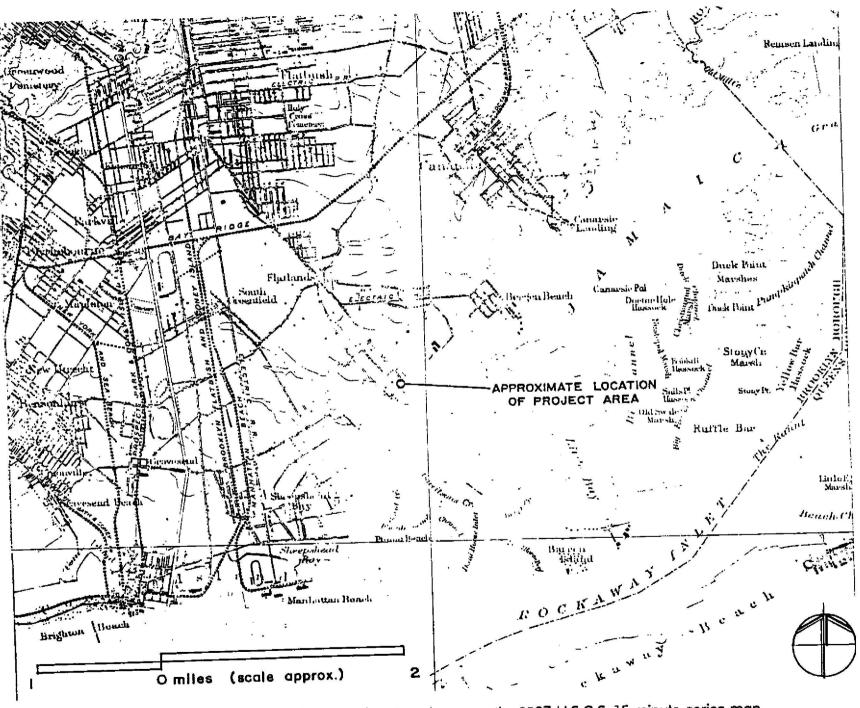
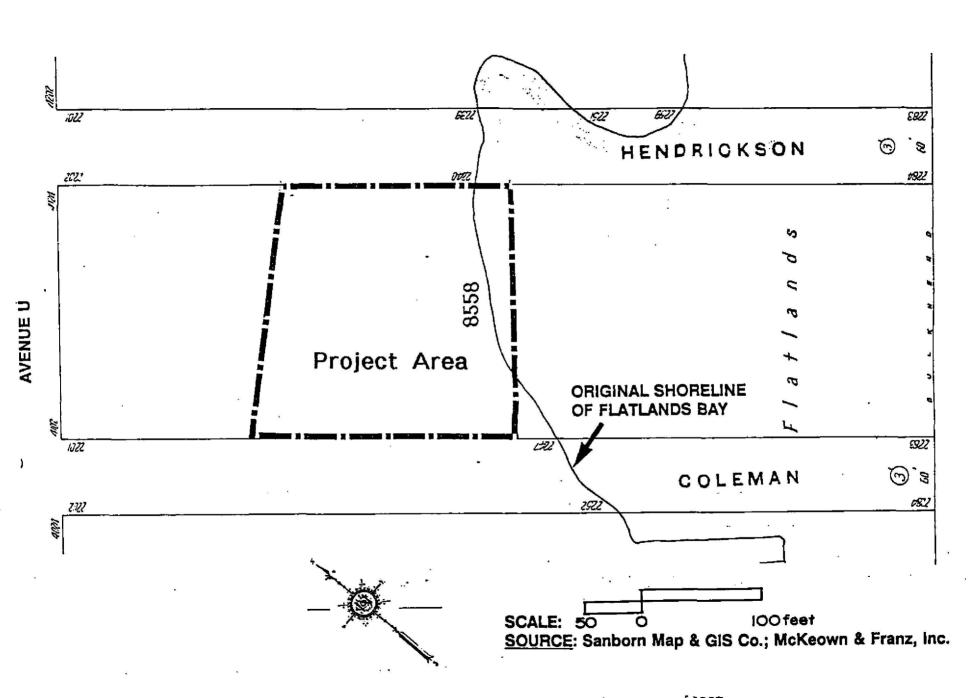
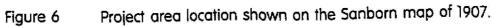


Figure 5 Project area location shown on the 1897 U.S.G.S. 15 minute series map, Brooklyn, New York quadrangle.





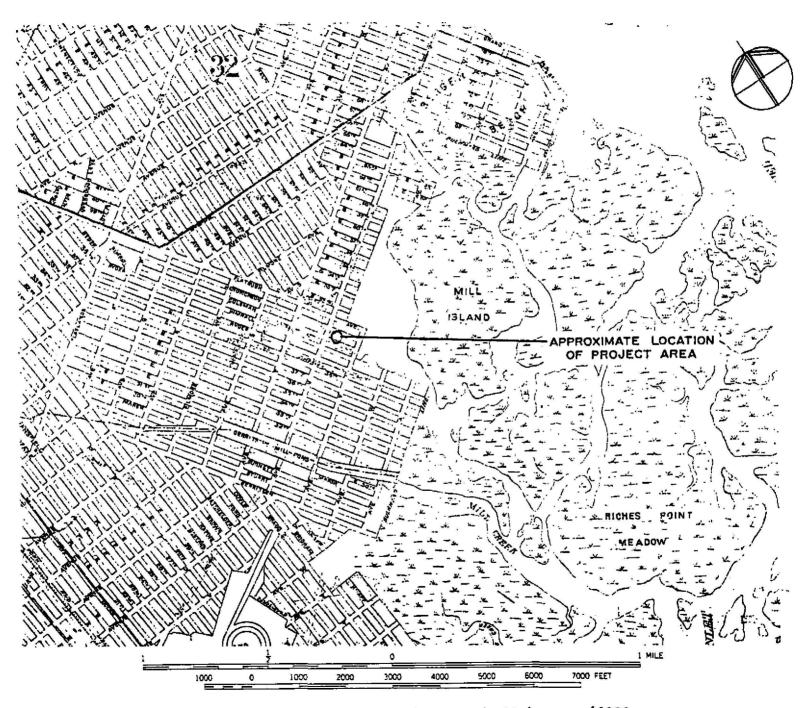
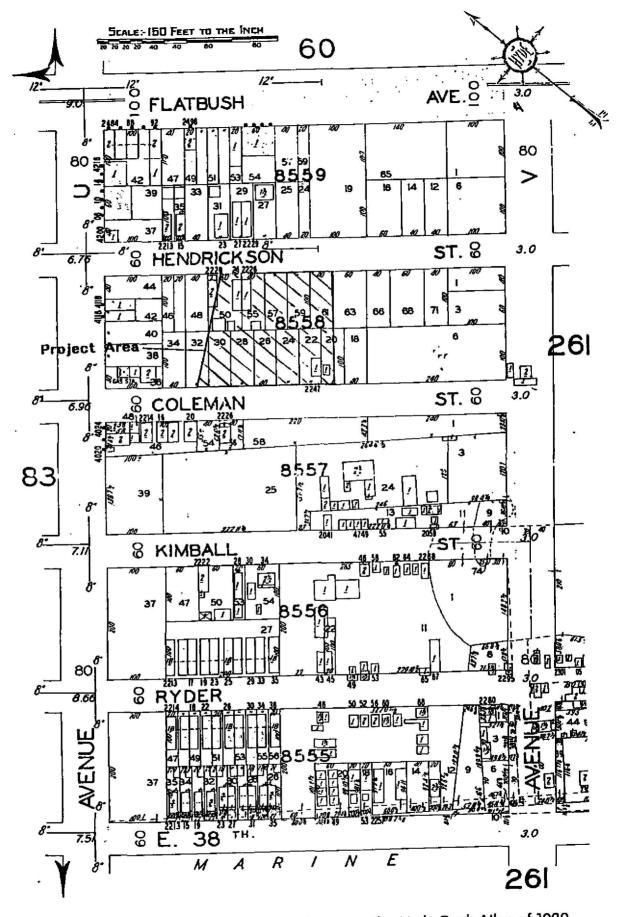
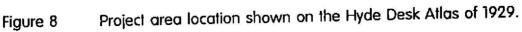
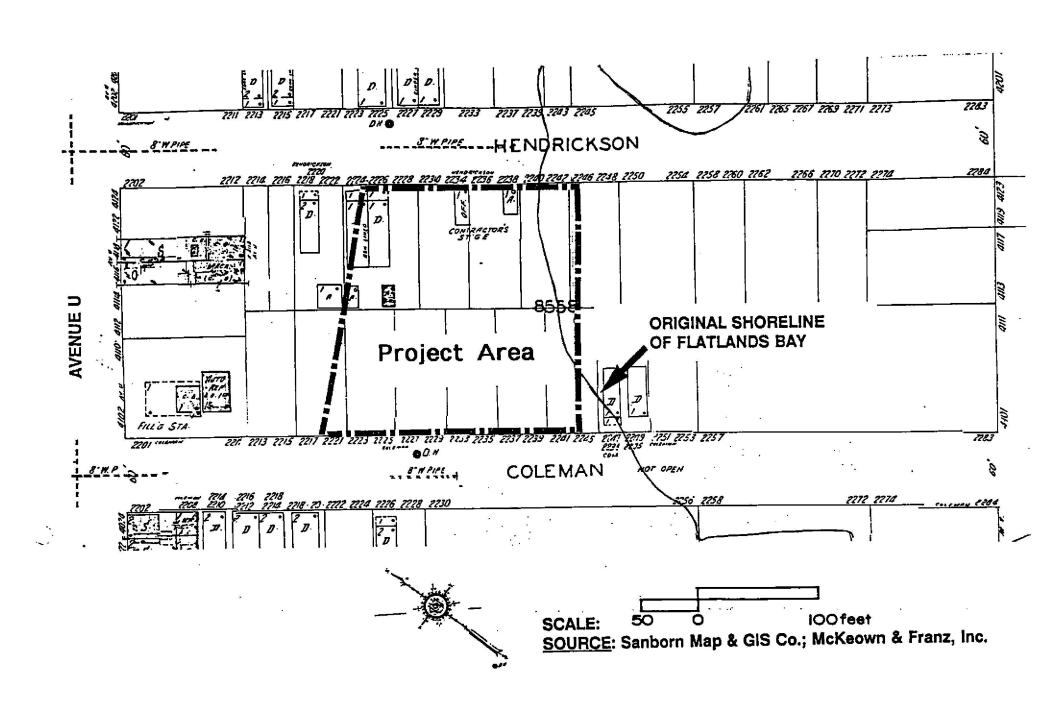


Figure 7 Project area location shown on the Hyde map of 1909.







Project area location shown on the Sanborn map of 1950. Figure 9

Since no structures or features are evident prior to the turn of the twentieth century when this area was filled in for urban reclamation, our conclusion is that the project area lies in an area of low historic potential.

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# CONCLUSIONS AND RECOMMENDATIONS

The project area lies within an area of high prehistoric potential. The Ryders Pond Site is located about ½ mile to the southwest. It is an extensive multi-component site and contains a burial area. Investigations there seem to have been a salvage excavation associated with construction. It is possible that the boundaries of the site are even broader than documented and may include the project area. The proximity of the site to the marsh and shoreline are not accidental. The marsh alone would have provided a variety of food including fish, shellfish, fowl, mammals, and edible vegetation as well as medicinal plants such as jewelweed, cattail and others. In addition, the land adjacent to the marsh line and our area of focus has been shown to have been historically productive as planting fields.

In addition to the nearby Ryders Pond Site, a prehistoric shellfish processing site lies approximately one mile east of the project area at Bergen Beach. Another processing site is located at Canarsie.

The type of archaeological site that we might expect to find within the project area could consist of a shell midden processing site with few associated artifacts. We might expect it to be from the Woodland Period and to have been largely or partially buried by a previously expanding marsh.

The project area lies within an area of low historic potential. Although this area was settled early, the Hendrickson Street parcel originally consisted of marshlands and land use was limited to salt hay gathering. Historic sites lie near the project area, however none are located on the project area.

The project area and the surrounding block were evidently filled during the last years of the nineteenth century. No structures appear on the project area until the 1920s. These small structures do not appear to be associated with any important people or events. They probably had no basements, given the location over old marshland, and would have left few archaeological deposits in the ground other than their foundations.

Should any construction be planned on the Hendrickson Street Rezoning project area in the future, we recommend that archaeological testing for possible prehistoric resources be completed prior to any earth-moving activities.

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