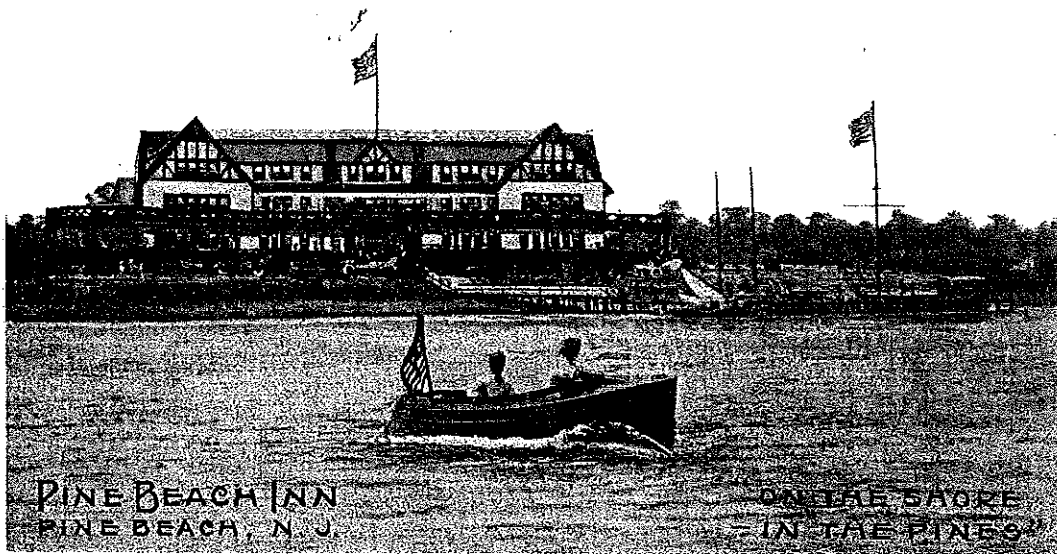
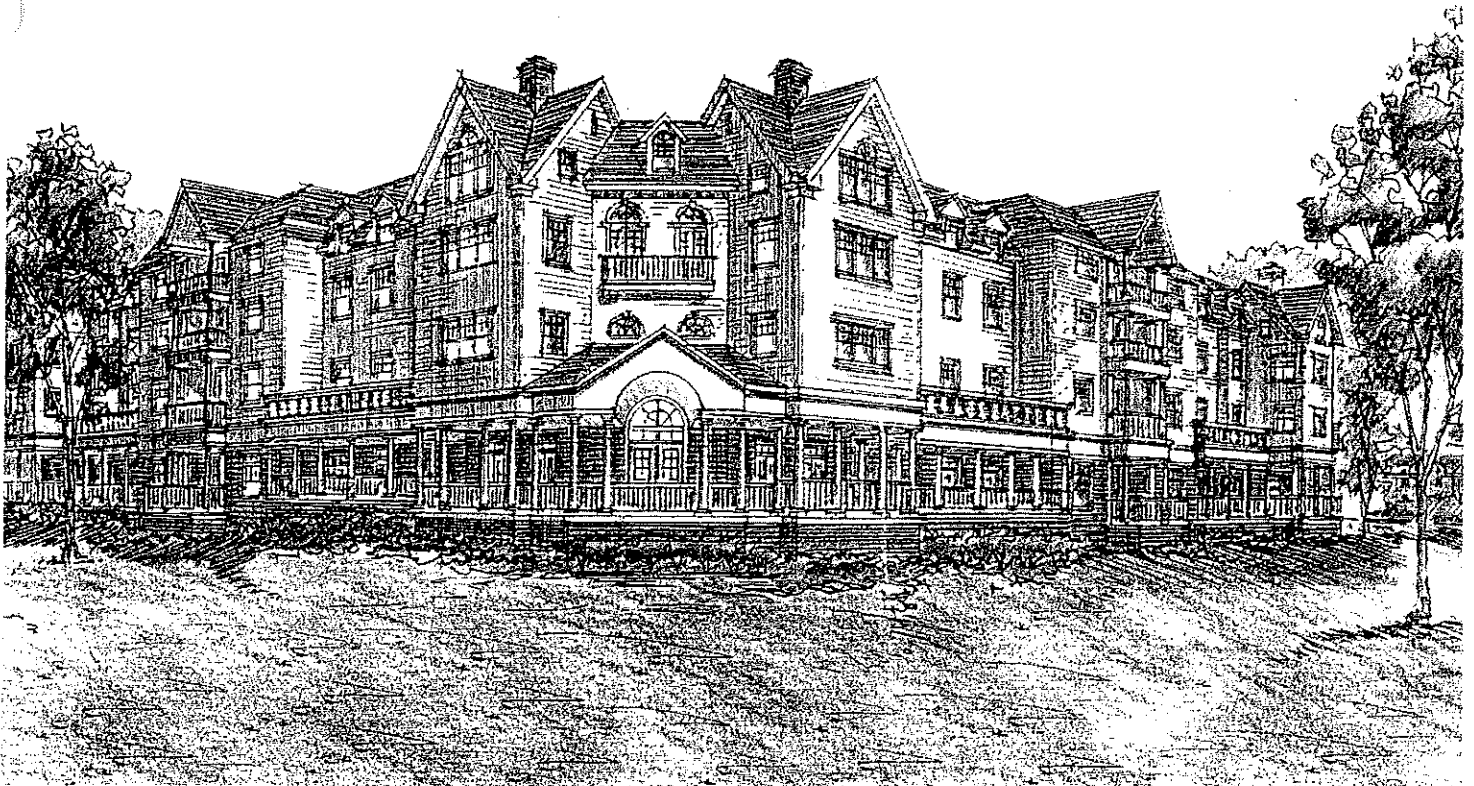




PAST

PINE BEACH RE-EXAMINATION REPORT



PRESENT

BOROUGH OF PINE BEACH

2001 MASTER PLAN REEXAMINATION REPORT

December 6, 2001

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Master Plan Reexamination Report

Borough of Pine Beach

Ocean County, New Jersey

Prepared for the Pine Beach Planning Board

The year 2001 Master Plan Reexamination Report of the Borough of Pine Beach is part of the Planning Board's ongoing efforts to guide the future development of the municipality, and to insure that the Borough's overall planning objectives and land use policies remain up-to-date. The Borough Planning Board has adopted the most recent Master Plan on October 5, 1995 and this land use study would update the policies as set forth in that document.

The Municipal Land Use Law, at NJSA 40:55D-89, requires that:

"The governing body shall, at least every six years, provide for a general reexamination of its Master Plan and development regulations by the planning board which shall prepare a report on the findings of such reexamination, a copy of which shall be sent to the county planning board and the municipal clerks of each adjoining municipality".

As per the Municipal Land Use Statute, the reexamination report must consider the following:

- The major problems and objectives relating to land development in the municipality at the time of adoption of the last reexamination report.

- The extent to which such problems and objectives have been reduced or have increased subsequent to that date.
- The extent to which there have been significant changes in the assumptions, policies and objectives forming the basis for such plan or regulations as last revised, with particular regard to density and distribution of population and land uses, housing conditions, circulation, conservation of natural resources, energy conservation, and changes in State, county and municipal policies and objectives.
- The specific changes recommended for the master plan, if any, including underlying objectives, policies and standards, or whether a new plan or regulations should be prepared.
- The recommendations of the planning board concerning the incorporation of redevelopment plans adopted pursuant to the "Local Redevelopment and Housing Law", P.C. 1992, c.79 (C.404:12A1 et. al.) into the land use plan element of the master plan, and recommended changes, if any, in the local development regulations necessary to effectuate the redevelopment plans of the municipality.

In addition to setting forth requirements of the master plan reexamination report, the Municipal Land Use Law also identifies the required elements of the Master Plan, said elements which follow were included in the 1995 comprehensive Borough of Pine Beach Master Plan. These include, 1) a statement of goals and objectives and policies for the development of the municipality, 2) a land use plan, 3) a housing plan and 4) a recycling plan. Other elements which may be incorporated into a comprehensive master plan document include a circulation plan; a utility services plan; a community facilities plan; a recreation plan; a conservation plan; an economic plan; a historic preservation plan and a stormwater services plan element. The master plan must include a specific policy statement indicating its coordination with planning policies on a county, regional and State level.

Other municipal planning documents have included; 1) a Borough Environmental Commission comprehensive "Natural Resources Inventory" report in March of 1998, and, 2) "Substantive Certification" by the New Jersey Council on Affordable Housing of its October 1999 Housing Element and Fair Share Plan.

The year 2001 reexamination report is intended to address the applicable statutory criteria as well as to build upon ongoing planning efforts in Pine Beach as outlined above.

Demographics and Population

According to the year 2000 census, the most recent population profile available, Pine Beach's overall census count was 1,950 persons, which was a slight loss of population from the 1990 census population of 1,954 persons. Further detailed census information in the 1995 Borough of Pine Beach Master Plan discussed the racial breakout, the housing profile and future population trends. The population trend predicted for the year 2000 of 2,400 persons did not materialize despite a slight increase in infill housing development along the Toms River and the anticipation of a large, yet un-constructed, assisted living senior complex.

The year 2000 census indicates that 5% of the overall population is under 5 years of age, 16% is between the ages of 45 and 54, 8% is over 75 years of age. The median age of all Borough residents is 41.6.

The latest census also offers further information regarding the household make-up of the Borough. According to year 2000 information, 26% of all households are couples with children, 8% are female headed with no husband, 22% are households comprising of single persons, 33% are with no children and 32% are considered senior citizen households. Year 2000 census information also indicates that there are 767 occupied housing units in the Borough demonstrating a positive increase of 27 units from the 1990 demographic.

1. The major problems and objectives relating to land development in the municipality at the time of adoption of the last reexamination (Master Plan) Reexamination report.

As of the adoption of the 1995 Pine Beach Master Plan, many of the matters brought to bear in the document are only now becoming fully realized. Through good planning and forethought of dedicated municipal officials, areas of land use focus have endured through the recent six-year term. Focus in such matters as the Redevelopment Zone, the rehabilitation of bay front docks and dedicated open spaces for parks and recreational purposes have all been receiving attention. Themes, which were cornerstones in the 1995 Master Plan, have been reemphasized through funding commitments from Federal, State or regional bodies. The next logical step in any planning effort has always been finding adequate resources to fulfill the goals and objectives initiated through a properly developed Master Plan. The vital nexus that New Jersey State Planning enabling law tries to establish between Planning Boards and Governing Bodies seems to have worked in the example of Pine Beach.

This is also true for issues which have a more immediate impact upon the local population, that being the balance between competing land use needs of the municipality. The 1995 Master Plan reinforces land use groups within the Borough which required modification and those groups which required emphasis reflecting the overall needs of the municipality. This was particularly the case in areas adjoining the former Faragut campus. In that a residential assisted care facility is planned for the former campus area, it is important that the immediate areas to the facility are sensitive to the outward impacts upon the site. That is why precisely the zoning surrounding the former campus remained single-family residential keeping with the tone of the new facility and also maintaining the visibility and positive impact onto the Toms River.

The Borough was able to also integrate important State land use and housing policies required by law. In 1999 the Borough was able to keep all major identified land use groups intact and at the same time foster affordable housing mandates as promulgated by the New Jersey Council on Affordable Housing (COAH). The "Housing Element and Fair Share Housing Plan" as part and parcel of the Master Plan was able to maintain early objectives of the land use profile of the Borough and also achieve more affordable housing opportunities for regional and local citizenry. This was also the case in the availability of New Jersey "Green Acres" funding for open space and recreational opportunities in Pine Beach. The Master Plan worked with policies and statements as they appeared in funding prerequisites to obtain monetary support through the program.

The overall emphasis of the Master Plan and various efforts by the Planning Board, the Environmental Commission and Mayor and Council has always been, and is particularly true within the previous six-year term has been to hone in on the single greatest amenity on Pine Beach, and that being the Toms River. Matters as relate to the river have ranged from as obvious as direct support in rehabilitating docking, the sprucing up of Riverside Drive, and as unseen, yet just as important to advocating low impact residential uses along the river. Borough officials are very cognizant of this reality and how those efforts translate most easily to residents of the community.

The Borough now needs to prepare for the next phase of revitalization, the actual siting of the Pennrose assisted care facility, and the continued evolution of the waterfront area of Pine Beach. This reexamination study endorses all original goals and objectives of the 1995 Master Plan as they particularly apply to the waterfront area. The continued revitalization efforts within the R-2 district acknowledges through action that the greatest amenity of the Borough needs to be compatible with all future intensions for redevelopment and development of the area.

2. The extent to which such problems and objectives have been reduced or have increased subsequent to the adoption of the 1995 Master Plan report.

In accordance with the "Goals and Objectives" section of the most recent Borough Master Plan, the Borough has taken deliberate steps in implementing many, if not all, of the objectives as stated in the 1995 Plan. The following is an analysis of each point as they appeared.

- 1) LAND USE- "To promote a balance among a variety of land uses that will support and improve the development character of the Borough. Guide new development and redevelopment to ensure efficient and beneficial utilization of scarce land while capitalizing on the inherent public facility and service efficiencies of concentrated development patterns."

The Borough has taken dramatic steps to sure up or implement positive aspects of the land use profile of the municipality as mentioned in the Master Plan. In areas which required redevelopment follow-through, in areas which required natural resource conservation, and areas which required commercial or retail initiative; the Borough in concert with its elected officials have made planning policies reality.

- 2) HOUSING- "To provide a wide variety of housing types which meet current and future populations of the Borough at all socio-economic levels. To maintain the residential character and existing land use formation of the Borough in its present form".

In coordination with the New Jersey Council on Affordable Housing (COAH), the Borough in the recent term implemented important local enabling legislation to create more housing opportunity for low-income persons and families. This was done through the creation of a locally funded and administered housing rehabilitation program, addressing an unmet affordable housing need through the

creation of a development fee ordinance and zoning to permit higher density residential uses within the B-2 zone. This affordable housing plan was ratified and adopted by COAH on October 6, 1999.

- 3) CIRCULATION- "To utilize the existing system of roads to serve as a basis of land use proposals. Capitalize on the high density development patterns in certain portions of the Borough that encourage the use of public transit systems and alternate modes of transportation to improve travel among major population centers, employment centers and transportation terminals."

The Borough has taken up the revitalization of major roadways. The emphasis on key roadways such as Motor Road and Riverside Drive has added to the improved circulation and overall amenity of the Borough. Pine Beach is also a designated stop for New Jersey Transit Bus service along Route #9.

- 4) COMMUNITY FACILITIES- "Encourage the expansion and improvement of community facilities to serve the needs of existing and projected populations in the Borough."

In this area the Borough has taken significant steps in ensuring that the community facilities and recreational resources are increased for residents. This is evidenced by the creation of the "Pine Beach Riverfront Trust" which was granted to the Borough from the New Jersey Department of Community Affairs (NJDCa) for the restoration and permanent improvement of the Pine Beach riverfront area. A grand total of \$175,000 in legislative grants was conveyed to the Borough for this purpose. The result of this grant has been to plan for a new public boat basin and marina/recreational area along the river front area of the Borough.

- 5) UTILITIES- "Expand and coordinate the expansion of the Borough's infrastructure system as it relates to water and sewer for future residential and non-residential purposes."

In this regard the Borough has also taken the initiative in the application and thereby the grating of a "Stormwater and Water Quality Management Plan" to the New Jersey Department of Environmental Protection (NJDEP) which plans to map out and configure the overall route of flow of stormwater from various sources within the Borough. With an overall plan completion date of December 2001, a plan will be put in place to mitigate the harmful impacts of stormwater runoff into the Toms River. This will be particularly important, as the Borough will be home to a major assisted living facility upon the now defunct Admiral Faragut campus. It is important to note that this is not an aspect of the sanitary sewer system of the Borough but a separate route and flow of stormwater.

- 6) CONSERVATION- "To promote conservation of environmentally sensitive land and overall energy conservation in the Borough."

The Borough has taken deliberate steps in its daily coexistence to protect its most vital resource being the Toms River. In land use planning matters before the Planning Board and constant efforts of Mayor and Council, persons and governing entities do all they can to protect and enhance their relationship with the river and its adjoining lands. The Borough also boasts a strong and vibrant Environmental Commission with key members to take advantage of funding resources and initiatives for the benefit of this important relationship.

- 7) RECREATION- "To provide for both active and passive recreation facilities to serve existing and projected populations of the Borough. The promotion of all "Green Acres" grant applications for the funding of various recreational and open space proposals through the municipality."

One of, if not the most important cornerstones in the redevelopment of Pine Beach's riverfront area is the siting of an assisted living facility on the former Admiral Faragut campus lands. As part of that effort is the siting of a new major park and recreation area, which will be, located between the facility itself and the river. The proposed "Vista Park" is made possible by the granting of New Jersey Department of Environmental Protection (NJDEP) "Green Acres" funding for the acquisition of these lands from its present owner.

- 8) ECONOMIC DEVELOPMENT- "To enhance and expand the Borough's economic base by promoting the growth of business opportunities and purposes."

Since the adoption of the 1995 Master Plan, the Borough has realized the full potential of existing commercial and retail uses along the Route #9 corridor. Infill commercial development has occurred in this sole commercial district in Pine Beach. Furthermore, it has been estimated that after the completion of the new assisted living facility within the R-2 district of the municipality, that there very well could be the generation of an additional 100 full time and part time jobs at the facility. These persons could very well be employed directly from the Borough's population.

- 9) INCREASED TAX RATEABLES- "To promote additional commercial growth in the business and commercial zones."

As mentioned previously, the Borough has experienced a moderate level of infill development and redevelopment within the sole commercial district fronting Route #9 in the Borough. Since 1995 a refurbished car wash, a refurbished "Roy Rodgers" and other commercial business have experienced a rebirth.

- 10) HISTORIC PRESERVATION- "To protect and preserve significant historic sites within the Borough."

The Borough together with its Environmental Commission has maintained the "protected" status of the four (4) properties as designated in the National Register of Historic Places and the New Jersey Historic Record.

11) RECYCLING- "To continue compliance with the New Jersey Mandatory Source Separation Recycling Act."

The Borough has maintained its relationship with Ocean County Solid Waste Management officials in this important service for the collection of refuse, which is recyclable.

12) INTERGOVERNMENTAL COORDINATION- "To provide for the regionalization of as many public services as feasible and economical. To coordinate the efforts of State, County, and municipal governments to ensure sound regionalization of services and encourage private sector participation. Also to provide supportive government regulations, innovative tax policies and other intergovernmental policies and programs in this effort."

The Borough has always been a trailblazer as it relates to intergovernmental participation. This relates to its efforts in regionalization of refuse collection, educational services, utility sharing and the concentration of resources along the riverfront basin.

3. The extent to which there have been significant changes in the assumptions, policies, and objectives forming the basis for the (1995 Master Plan or development regulations last revised

Some specific aspects of implementation of LAND USE OBJECTIVES of the last Master Plan has been in the areas of waterfront preservation and the dispensation of the Admiral Faragut campus lands. Another definitive step at implementation of policies as contained in the 1995 Master Plan is the maintaining of all existing land use groups and the zoning boundaries in which they exist. The strong residential use group coupled with a vibrant commercial district along Route #9 has worked for the benefit of residents and there is no reason to expect it will not continue. All said zoning is maintained despite the incorporation of affordable housing policies as mandated by the New Jersey Council on Affordable Housing (COAH), and infill residential development along the fringes of the R-2 zone or the Redevelopment District, the former site of the Faragut campus.

In areas of roadway CIRCULATION, efforts have been underway for roadway stabilization of Hillside and Cedar Avenues and the lessening of traffic through a traffic light on Mizzen Lane in conjunction with the Borough of Beachwood. Engineering efforts have also taken place within the past three (3) years in curb cuts and the resurfacing of Motor Road and Riverside Drive. Grants have constantly been sought from State of New Jersey resources for such initiatives as pedestrian walkways or "river walks" and bikeways along the Toms River.

In the areas of COMMUNITY FACILITIES the Borough has benefited from over \$200,000 in Federal Community Development Block Grants (CDBG) from the County of Ocean. Such grants have helped local efforts in its housing rehabilitation program for low and moderate-income residents and its efforts to help disabled persons who need to gain access to all public facilities and amenities. The Borough has also taken definitive steps in the upgrade of its stormwater piping system for the benefit of the pending Pennrose facility and eliminated dead end water mains by looping the entire system at its ends.

The Borough has also been awarded, with other local municipalities, high praise for being one of the best towns in keeping storm water from polluting the local Toms River and local tributaries. With the award came additional monies from the State Department of Environmental Protection for the awareness and education of the negatives of stormwater runoff and water pollution.

In the areas of RECREATION the Borough has taken definitive steps to maintain its parks and waterfront areas with the help of volunteers such as the "Senior Men's Club", the "Clean Team", the "Eagle Scouts" and the "Beautification Committee". Such an example of volunteering with all groups was the rebuilding of the bulkhead for the main dock and boat ramp. Flower boxes were also installed through an effort of the Eagle Scouts at Motor Road and Pennsylvania Avenue, Route #9 area with the "Lamp Post Inn" and the intersection area at Cedar, Linden and Pennsylvania Avenues.

INCREASED TAX RATEABLES can be identified through the construction of ten (10) newly constructed homes at Marion Avenue . Commercial improvements have also been noted at specific businesses, most notably at the Dunkin Doughnuts-Basking Robbins store, the Mobil gas station and a significant office building, all within the B-2 commercial zone along the Route #9 corridor.

However, the most significant infusion of tax ratable is the "Vista Property" or Penrose Assisted Living facility of \$1.45 million purchase price for the property with annual payments into local coffers over the next several years. Furthermore, the facility will generate approximately \$250,000 a year in overall revenue to the Borough.

Another significant milestone for Borough residents is the outstanding "recapture" percentage of all RECYCLABLES as noted by the Ocean County Solid Waste Management Department. Pine Beach's annual recycling percentage is 50.74% for the year 2000.

In the area of INTERGOVERNMENTAL COORDINATION the Borough has binding agreements with Beachwood Borough in sewer cleaning efforts and First Aid and with Berkeley Townships' in animal control capabilities.

The Borough of Pine Beach has taken deliberate steps to ensure that the future development of the municipality follows a planned route in conformance with goals and objectives of the 1995 Master Plan. The fundamental expectation of the latest Master Plan was to ensure that the redevelopment of the Admiral Faragut Academy lands did not fall victim to unchecked and wonton development schemes but a chosen path as described in the Redevelopment Plan and culminating in the text of the 1995 Master Plan.

This Reexamination Study takes those efforts one more step along the planning process. This study has outlined what milestones were envisioned in the 1995 plan and what expectations were fulfilled within specific development and redevelopment objectives. The core focus was the continued preservation of the waterfront district of the municipality and the rational redevelopment of Faragut structures fronting this district and the Toms River. This Reexamination Study puts proper perspective on those accomplishments within the recent six (6) year term.

4. The specific changes recommended for the master plan or development regulations, if any, including underlying objectives, policies and standards, or whether a new plan or regulations should be prepared.

For purposes of conformity, this Reexamination Report reestablishes and reemphasizes the uses as prescribed in Borough Ordinance 99-09-535 for the R-2 zone located within the waterfront district of the Borough. Those uses are “senior living”, “senior individual living”, “senior assisted living”, “nursing facilities”, “supportive senior living or nursing facilities”, “nursing homes”, “life care facilities”, “congregate care facilities”, “assisted living facilities” and “extended care facilities”. The uses are also restricted to low density residential (R-150), public and private schools, churches or places of worship, general same lot offices for the conduct of professional business and private home business type uses. All said uses are reaffirmed as stated in Borough Land Use Ordinance 95-05-469 and 99-09-535.

This plan also fully supports and reemphasizes the Pine Beach Borough Stormwater Management Plan (as enclosed). The plan lays out the prospective route of storm water flow within the Borough’s above ground and underground routing system. The overall harm to the Toms River has been mitigated through this dynamic and innovative plan.

The plan also restates the need for the preservation of local natural resources. Therefore keeping consistent with all facets of Borough government working as one, enclosed is a copy of the Borough of Pine Beach 1998 Natural Resources Inventory. The NRI is also to reflect the appearance of the white tail deer specie as well as the appearance of beach plum within the Borough.

5. The recommendations of the planning board concerning the incorporation of redevelopment plans adopted pursuant to the "Local Redevelopment and Housing Law", P.C. 1992, c.79 (C.404:12A1 et. al.) into the land use plan element of the master plan, and recommended changes, if any, in the local development regulations necessary to effectuate the redevelopment plans of the municipality.

This Reexamination report hereby reemphasizes the recommendations as outlined in the Borough of Pine Beach "Redevelopment Compliance Report" dated April 10, 1995 in conformance with New Jersey Redevelopment and Housing Law. The compliance report followed specific planning standards as set forth in the law. The compliance report also set forth the basis for the overall redevelopment of the Admiral Farragut Academy core campus area. The report led to specific findings in the 1995 Master Plan culminating in the formulation of new land use and zoning classifications for the R-2 district.

APPENDIX

Reexamination Report Insert #1

Stormwater Management Plan

STORMWATER WATER QUALITY AND MANAGEMENT PLAN
BOROUGH OF PINE BEACH

DECEMBER 2000

The overall goal of this proposal is to establish the best management practices (bmp's) in order to minimize non-point source pollution from the Pine Beach discharge points tributary to the Toms River. Waterways in New Jersey have been classified as among the most degraded in the nation. Stormwater through non-point source pollution have been indicated as the prime polluter of our rivers which are utilized for recreational use. The Toms River has been classified as a shellfish area and is used extensively for boating and swimming. This project will identify the locations for improving the water quality of stormwater discharged into the river and provide an opportunity for the improvement of aesthetic and recreational quality for users of Pine Beach's and other communities waterfront facilities.

A plan will be prepared and a strategy established to protect the natural and environmental resources that will preserve stream corridors and drainage systems tributary to the Toms River. The existing infrastructure maps will be utilized to establish the locations of outfalls, track them upstream, and establish locations and possible techniques to treat stormwater especially in the first flush situation. A map will be prepared suggesting the location of these alternatives and a report prepared to recommend the best practical solutions to achieve improved water quality. The project has local government and community support, especially through the Pine Beach Environmental Commission and the Pine Beach Council. Since Pine Beach has docking and beaches within its boundaries, it is essential to preserve that water quality for the enjoyment by the users of those facilities.

Since the Toms River borders numerous municipalities and ultimately leads into Barnegat Bay, it is part of the Barnegat Bay Estuary Program and cleaning up just Pine Beach's area will help improve the water quality in the entire region. This project will go hand in hand with the partnership for non-points source pollution control in the Barnegat Bay Watershed under cooperatives with the Ocean County Soil Conservation District, Rutgers Cooperative Extension Service, the U.S.D.A. Natural Resources Conservation Service, the County of Ocean, Barnegat Bay Watershed Association, New Jersey Sea Grant Education and Outreach Program, the D.E.P. Offices of Environmental Services, and the South Jersey Resource, Conservation and Development Council.

It has been the goals of the N.J.D.E.P. to minimize the impact of non-point source pollution into navigable and recreational waters. This project will present the study and the mechanism to help achieve those goals of cleaning up shellfish waters.

The State Development and Redevelopment Plan encourages improvements into developed areas. Pine Beach is almost exclusively developed and this correction measures will concentrate cleanup in already developed areas. Also involved in the redevelopment plan is the encouragement for the preservation of open space and recreational facilities. This plan will achieve that by hopefully placing some of these treatment facilities in areas that will be reserved as open space.

This project will protect environmental resources in particular the boating and swimming areas along with the shellfish areas of the Toms River and the Barnegat Bay by improving the water quality of the discharges from stormwater and non-point source pollution discharges.

Since this project is almost completely in a developed area and that open space and recreational facilities are at a minimal in the developed areas. This project will help promote and preserve the existing facilities so that they will not be closed because of pollution problems.

This project will go hand in hand with the Barnegat Bay Partnership Program which helps to promote through circulars and additional winter activities for public awareness on non-point source pollution. Other programs have attempted to advertise by signs, billboards, etc. to educate the public on what can be done. This will go hand in hand with the previously and ongoing grant of the Pollution Preventive Incentive Program which was led by Pine Beach and formulated with four municipalities for stormwater clean up. The proposed solutions will be published in Pine Beach's quarterly newsletter which educates all of the property owners within Pine Beach. The ultimate goal is to help implement pollution preventive programs within the Borough.

Reexamination Report Insert #2

1998 Natural Resource Inventory

NATURAL RESOURCE INVENTORY

BOROUGH of PINE BEACH
OCEAN COUNTY, NEW JERSEY

NOVEMBER 1997
MARCH 1998 (Revision)

PINE BEACH BOROUGH ENVIRONMENTAL COMMISSION MEMBERS

DAVID McKEON, CHAIRMAN
DUANE GREMBOWICZ
LINDA FOSTER
RONALD VIGLIOTTI
BRYON DuBOIS
CHRISTOPHER BOYLE, BOROUGH COUNCIL LIAISON

A. EXTERNS MEMBERS

FRED LESSER
SUSAN PITCH
JANET LARSON, CONSULTANT

BOROUGH COUNCIL MEMBERS

MAYOR, RUSSELL CORBY
JOSEPH BOYLE, COUNCIL PRESIDENT
JOSEPH HUNT
LAWRENCE CUNEO
KEITH LEONARD
CHRISTOPHER BOYLE
ROBERT BUDESA

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ADDUCTION

ion

Presented within this report is an assessment and analysis of the Natural Resources
ed within the Borough of Pine Beach, Ocean County, New Jersey. This environmental
y definition is referred to as a "Natural Resource Inventory" (NRI) which contains the
ng summary factors; surface water, aquifer recharge areas, steep slopes, soils and wetlands,
azard areas, open space and a profile of local historic sites and vegetation indigenous to
le. These environmental aspects are very critical considerations in the context of
ment within the municipality as well as for the preservation of vital environmental
es prevalent in the Borough of Pine Beach.

This study of Pine Beach's environmental resources is an analysis of the Borough's critical
es re nced through the most current data from State, County and local sources.

The information is provided in both text and graphic form, mapped in a series of "factor
Each factor map is a graphically produced and displayed on acetate overlays, enabling the
view the maps in relation to the comprehensive "base map" of the jurisdiction located
ath the individual factor maps.

Purpose

The NRI's purpose is to provide a profile about environmental assets and sensitive areas of concern throughout the Borough for evaluative purposes where impacts and limitations are critical. It is essential that NRI's primary use be centered on local land use applications and decisions.

Today, and for the future, the NRI is an indispensable tool for municipalities to gather information, and then to evaluate sensitive areas for decisions based on *wise use* criteria which will hopefully result in the enhancement of the quality and quantity of our environment within the immediate community.

Use

Method & Mapping

The following factor maps are included on the display (demonstration) board. These maps are drafted accordingly in proportion to the prepared base map located (underneath) upon the original base board at a scale of 1"= 200'.

1. Soils Map
2. Surface Water Map
3. Wetlands Map
4. Flood Hazard Map
5. Open Space
6. Topography Map

Wetlands- Outlines the importance of such areas in the jurisdiction. New Jersey State delineation maps locates wetlands within the Borough.

Wildlife- Describes and inventories the latest available information of animal habitation and endangered species as compiled by the Pine Beach Environmental Commission. Table 1.2 lists animal species found within Pine Beach or the adjacent Toms River.

Historic Sites- This factor has been researched and reported on by the Borough Environmental Commission. It utilizes past information and recent publications listing historic structures and areas of historic importance in the municipality.

Geology & Aquifer Recharge- Reports subsurface characteristics and aquifer recharge areas.

Open Space- Describes the various open space areas located within the Borough.

Vegetation- This factor has been researched and reported by the Pine Beach Environmental Commission. Information includes vegetative cover, particular forests and their content. Table 1.1 also includes a listing of the most common vegetative species found in Pine Beach.

Surface Water- A description of bodies of water from large rivers to small ponds found in the Borough.

Flood Hazard Areas- Explains the limitations of these areas, delineating their locations within the Borough of Pine Beach., including potential flood hazard areas mandated by the NJ State Department of Environmental Protection.

Environmental Impacts- A general outline of potential high impacts on the local environment found in the Borough of Pine Beach.

SURFACE GEOLOGY- see Display board

OPEN SPACE- see Display board

SLOPE

Slope is categorized as the number of feet change in vertical elevation per 100 feet of horizontal distance. Slope is very critical to development, parking design, grading and drainage, as well as residential design.

Two designations of slope categories exist within this NRI report. They are as follows:

0-5%	Slight
6-10%	Moderate

The slight slope designation is predominate within the Borough of Pine Beach.
The majority of slight slope designations are located centrally throughout the municipality.

The moderate slope designation are found on the coastal areas of the Borough abresting the Toms River.

Major slope designations are not a significant concern within the Borough. However, steep slopes might hinder prospective development within the municipality. The main concern with steep slopes within the Borough are the erosion hazards that are present at several locations along the waterfront. The hazards impact both environmental and infrastructure concerns.

The slope overlay found on the display board outlines slight and moderate categories with color variations in a graphic representation. The slight slope designation is a light green color (0-5%), while the moderate category is a darker green variation, displaying the steeper slope (6-10%).

Information pertaining to steep slope was obtained through referencing U.S.G.S. topographic maps. The U.S. Geologic Survey maps effectively specify slope contours and differentials for various regions throughout the State of New Jersey.

SOILS

The various soil types found in the Borough of Pine Beach are found on the overlay map labeled "soils". The data collected for this particular inventory was gathered from the Ocean County Soil Survey dated April 1987. The soil map units display the location and soil type throughout the Borough.

The soil types within the Borough range from the well drained Evesboro and Lakewood sands to the sand dune filaments of the Fripp fine sand along the shoreline, and from the Urban Land Series to the seasonally wet Lakehurst Sands to areas that are well covered by hardscape, paving and man made amenities. Following is a listing of soils and their descriptions in Pine Beach.

EvB - Evesboro Sand, 0-5% slopes. This soil is nearly level, gently sloping and is excessively drained. It is on streams in low positions. Slopes are convex and are about 40 to 500 feet in length. The areas range from 4 to 150 acres. The permeability of this soil is rapid in the subsoil substratum. Available water capacity is low. The common trees are short leaf pine, virginia pine, pitch pine, and black, white and chestnut oaks. The sand and the surface layer, the permeability, and the available water capacity are the main limitations of the soil for community development. They especially limit the soil as sites for sanitary landfills, septic tank absorption fields, lawn and shrubs, picnic areas, camping grounds and athletic fields. Evesboro Sands are found in the southern part of Pine Beach.

FtB - Fripp fine Sand, 2-10% slopes. This sand is gently undulating to rolling, and is excessively drained. It is found on divides, side slopes and coastal dunes on the barrier islands. Slopes are convex, and range from 20 to 100 feet in length. The areas range from 50 to 1000 acres. The areas range from sea level, and 20 feet above. Most areas are subject to flooding from the ocean during severe storms. The permeability of this soil is rapid, and available water capacity is very low. Because of their proximity to water, most areas of this soil are suitable for wildlife habitat. Erosion and salt spray from the ocean make the soil unsuitable for most other uses. The wind erosion hazard is severe, but can be controlled by maintaining the present plant cover include American beachgrass on bare areas. Fripp sands are found on the Beach areas of the Borough.

LhA - Lakehurst Sand, 0-3% slopes. This soil is nearly level, moderately well drained or somewhat poorly drained, found in depressed areas and on low terraces. The areas are irregular in shape and range from 10 to 500 acres in size. The permeability of this soil type is rapid in the subsoil and substratum. The available water capacity is low, but water is available to plants early in the season from the water table. Pitch pine, black oak, white oak, and blackgum are the common species of woodland found. Lack of available water capacity limits tree growth when in bloom. The seasonal high water table limits the soil as sites for houses with basements, septic disposal fields, and sanitary landfills. The high sand content limits the soil for most recreational uses. Lakehurst Sands are found along an intermittent stream corridor, west of Motor Road.

LwB - Lakewood Sand, 0-5% slopes. This nearly level to gently sloping, excessively well drained soil is located on divides and steep slopes. The slopes are convex and range from 100 to 500 feet in length. The areas are irregular in shape and range from about 10 to 1500 acres. The permeability of this soil is rapid in the subsoil and rapid to moderate in the substratum. Available water capacity is low. Pitch pine, blackjack oak, chestnut oak, black oak and white oak are common species. The soil is generally suitable for most urban uses, but the loose, sandy surface is a limitation for recreational uses and the rapid permeability limits use for sanitary landfills. Lakewoods sands cover the vast majority of Pine Beach. The well drained nature of this soil type inhibits flooding of yards and basements, but places limitations on non-native vegetation species which have high available water capacity requirements.

PO- Psammets, sulfidic substratum. This unit consists of deep moderately well drained and somewhat poorly drained, sandy fill material over Sulfaquents and Sulfihemists. The surface of the areas has been smoothed, and most areas are nearly level. They are used for residential, commercial and industrial sites. The material is rapidly permeable. Available water capacity is low, as well as organic matter content, and natural fertility. Before being filled, these sites were subject to daily tidal flooding. Sufficient fill has been added to prevent tidal flooding, but the areas are especially subject to flooding during storms. Because of this storm flooding hazard and the variability in kinds and amounts of fill, onsite investigation of the areas is needed to make interpretations for any specific use. Only the extreme Northeastern corner of the Borough contains this soil type.

UL- Urban Land. This unit consists of areas where more than 80% of the surface is covered by asphalt, concrete, buildings, or other impervious surfaces. Examples are parking lots, shopping centers, airports, industrial parks and schools. These areas are more common in the Northern part of Ocean County, and east of the Garden State Parkway. The areas generally range from 10 to 100 acres and are nearly level or gently sloping. Onsite investigation is needed to determine the suitability of this unit for any proposed use. Only the extreme Southwest corner of the Borough contains this soil classification, which is adjacent to NJ State Route #9.

DoA- Downer Loamy Sand. Slopes range from 0-5%. This well drained, nearly level soil is found on divides. This soil is most suitable for development, since restrictions are few. The contours of the sloping areas is found on areas which are mostly convex, ranging in length from 100-400 feet. Organic matter is moderate, and the surface layer is extremely acidic, and the subsoil and substratum is very acidic. A small area of DoA soil is located on the Southern boundary of the Borough.

WETLANDS

Wetlands are classified by the US Fish and Wildlife Service, as "lands that are sometimes, or always covered by shallow water or have saturated soils and where plants adapted for life in wet conditions usually grow."

Environmental stipulations have become greatly increased due to an "awareness renaissance" of wetlands and other valuable natural commodities. Wetlands contain diverse wildlife habitats, drainage, flood control, filtration, erosion control, ground water recharge and recreation.

Protection of wetland areas is absolutely essential to keep a vital resource intact. The following important factors are responsible for the attention given to wetland resources.

The Borough contains a significant amount of floodplain area along the shoreline portion of the municipality bordering the Toms River. (see display map) Any future development, especially having to do with the former Admiral Farragut Academy lands, NOT reserved for public open space and/or recreational use, should be developed cognizant of this serious and potentially dangerous limitation.

Erosion Control: The protection of river banks from weathering and erosion is essential, and the retention of soil from hydrophytic vegetation and specific planting practices should be implemented to prevent erosion hazards.

Flood Control: Wetland areas create habitats that store water naturally, and can be a major asset to the prevention of flooding from excess runoff by serving as retention areas.

Wildlife Habitat: Species found in wetland areas are very diverse and unique. Various species of fish, amphibians and birds such as the Egret are all important and sometimes rare requiring measures of protection. Wetlands provide a unique habitat necessary for their survival and are important for nesting, mating and food.

Hazard Control: Treatment of water resources can be implemented by wetlands. Oxidation reactions, the control of sediment and the retention of nutrient matter, can all take place in the wetland environment.

Education: Wetlands provide a unique educational opportunity for many people. These resources are located in many different areas and provide access to all of those interested. The knowledge that may be ascertained by these critical areas increase awareness, as well as potential concern and responsibility for our environment.

Documented wetland areas in the Borough of Pine Beach are coastal wetlands found on the banks of the Toms River, following the course of Riverside Drive. These particular areas are of Estuarine, Intertidal Flat (E2FL) category, which is classified as a wetland that takes place in the estuarine environment, of intertidal flats of mud and sand, salt marshes, and in the case of Pine Beach, open coastal bays. These areas are typically flooded by tides, and exposed to air twice daily. The extent of wetlands in Pine Beach is relatively small. The overlay found on the display board labeled "wetlands" provides the outline of wetland areas in the Borough, and thereby can be used for general planning and development review. However, and specific determinations should be made by an on-site investigation. The boundaries as depicted on the map are not regulatory boundaries, field verification is required.

Another important reason to discourage floodplain encroachment is to protect water quality. If the natural vegetative cover is removed along streamways, erosion is accelerated, thus causing sedimentation of the streams and water bodies downstream.

The US Department of Housing and Urban Development, Federal Insurance Administration, has published Flood Hazard Boundary Maps which report the flood boundaries of Pine Beach. These maps have been used to prepare the Flood Hazard Areas NRI map overlay. Flood boundaries have been delineated based upon 100 year and 500 year flood levels. Additionally, the 100 year flood areas can be divided into a floodway and floodway fringe. This has been done to foster floodplain management and discourage encroachment upon flood hazard areas. The floodway is defined as the channel of a stream plus any adjacent floodplain management areas which must be devoid of encroachment in order that substantial increases in flood heights can be avoided during a 100 year flood. The maximum flood height increase allowable in this instance is 0.2 feet.

The area between the floodway and the outside boundary of the 100 year flood, is defined as the "floodway fringe". This area encompasses the portion of the floodplain that could be encroached upon without increasing the surface elevation of the 100 year flood more than 0.2 feet.

The floodplains of the Borough corresponds to low land areas adjacent to the Toms River. These areas are primarily subject to tidal flooding which raise bay levels during tropical or winter storm events. The areas most susceptible to flooding are in two (2) separate areas; the intersection of Riverside Drive and Avon Road and further East at the intersection of Riverside Drive and Midland Avenue near the Pine Beach Yacht Club.

Furthermore, a large portion of the recreational fields acquired from the Admiral Farragut Academy are located in a flood hazard area, a fact which will need to be taken into account when considering any improvements to the area.

HISTORIC SITES

The development of Pine Beach Borough originated through the efforts of early founders, Robert H. Horter and George Kelly, who in 1908 wanted to create a summer colony and began the purchase of land under the name of the **"Pine Beach Improvement Company"**. Both men were natives of Philadelphia, and hence the name of many streets in the Borough.

"Buhler Mansion", a fairly well-known landmark, was built by a New York hatter and was frequented by New York financiers in the early 1990's.

Horter and Kelly also were the driving forces behind the establishment of the **"Pennsylvania and Long Branch Railroad Line"** which made easy public access to and from Pine Beach as well as other seaside communities such as **"Island Heights Junction"** along the line. Another featured stop was the **"Windward Yacht Club"**. The metropolitan connections of the rail line brought to the area many visitors and a significant amount of commerce especially during the summer months. This was indeed true as it related to the increase in the local real estate market during this period.

Another historic area of significance within Pine Beach was the **"Pine Beach Inn"**, which was erected and opened in 1910. The Tudor-style structure was known as the largest hotel in the greater Toms River area. The **"Pine Beach Chapel"** was also opened in 1910, and was constructed on lands dedicated to the church from the Pine Beach Land Improvement Company. The Chapel still exists in its present form today.

Other historically significant structures include the **"Pine Beach Yacht Club"** which was founded in 1915 and stands today as an important element in local yachting pursuits. The Club was, and remains, a center for community interaction as well as recreation. The structure was constructed by Lee Roy Hutchinson, and expanded to a two-story structure in 1921. The Club has become more of a center for sailing activities, where it originally was conceived as a 'community center' for residents.

The importance of environmental planning is to maintain a sound balance between growth through development of a community and the required open space contingent for ecological and recreational purposes. Pine Beach is fortunate to have grown in a manner which takes these conditions into consideration. Contiguous open space areas interconnecting pathways between aesthetic areas are encouraged in order to provide further areas for recreational opportunities and other areas for environmental habitats.

Throughout Pine Beach a number of aesthetically pleasing attributes exist in their natural form such as trees and shrubs. Even residential areas are often characterized by mature pine and oak species, representative of the natural climax forest for the area. Although Pine Beach does not contain a state registered "Specimen Tree" (a tree which is recognized as the largest of its species, or one which has a diameter breadth of 85% of the circumference of the largest tree), many trees exist that are worth preserving.

The primary evergreen tree found in the Borough is the Pitch Pine species. The three (3) general oaks found in the Borough are the Chestnut Oak, Black Oak, and White Oak species. Early Pine Beach most likely contained an herbaceous understory of lowbush blueberry, huckleberry and bayberry species.

During construction of a development site, trees worth saving must be carefully fortified or moved on-site taking efforts to protect them from any cutting, filling or other construction practices which may damage the tree.

GEOLOGY and AQUIFER RECHARGE

The Pine Beach area is located on what is known as the **Pennsauken** formation. This geological outcrop contains sand sediment as well as cemented like gravel known as "ironstone". The formation primarily contains ironstone as well as quartz pebbles.

Pine Beach serves as an aquifer recharge area for this formation. The Pennsauken outcrop, generally covers the Toms River area in its southeastern portion and as far as northern Ocean County including the municipalities of Brick and Lakewood extending near to the Garden State Parkway.

WILDLIFE

Wildlife of an area is directly related to climate and vegetation. Wildlife has specific requirements it needs to maintain certain habitats. Different types of wildlife require a specific range of territory for their niches. Wildlife species are very much dependent on natural vegetation. Through time, wildlife and vegetation have evolved to compliment each others needs in the natural cycle. As a result, wildlife with a specific habitat requirement will only live successfully where food staple is found. Habitat preservation of these areas is a sound concern. Certain animal species have adapted to man made disturbances. These animals, such as the gray squirrel and many bird species live cooperatively with humans for the most part. For other species, such as raccoons, opossums and skunks, there is a much more uneasy coexistence.

The New Jersey Department of Environmental Protection (DEP) Division of Natural Lands Management does not have any records of any threatened or endangered species within the immediate area of Pine Beach. However, there is a possibility that certain types of endangered species could exist in the area if the proper habitat existed in the Borough. A comprehensive list of mammals, birds, reptiles, amphibians and fish which are likely to be found in Pine Beach is located in Table 1.2 of this report.

RESOLUTION 97-30

Received
2/24/97

WHEREAS, there exists a need for a Natural Resource Inventory, and funds are available through the office of Environmental Services' matching Grants Program Award to the Pine Beach Environmental Commission and 1996 Pine Beach Budget; and,

WHEREAS, the Local Public Contracts Law (N.J.S.A. 40A: 11-1 et. seq.) requires that the resolution authorizing the award of contracts for "Professional Services" without competitive bids must be publicly advertised.

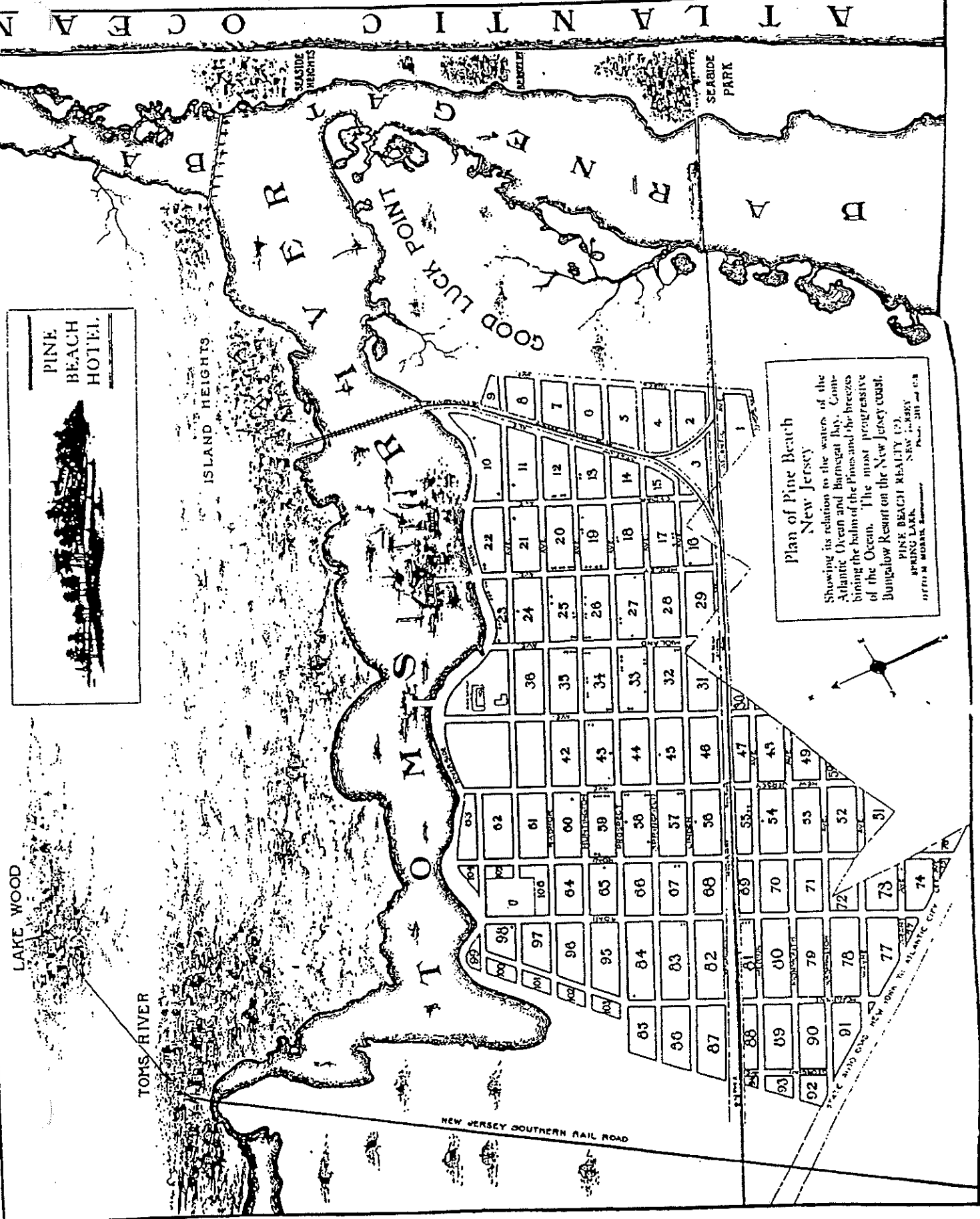
NOW THEREFORE BE IT RESOLVED by the Mayor and Council of the Borough of Pine Beach, County of Ocean, State of New Jersey, as follows:

1. The Mayor and Clerk are hereby authorized and directed to execute the attached agreement with Environmental Analysts, Inc. PO Box 1288, New Brunswick, NJ 08903 in the amount of \$4,500.00.
2. This contract is awarded without competitive bidding as a "Professional Service" in accordance with 40A:11-5(1)(a) of the Local Public Contracts Law because the Pine Beach Environmental Commission and Governing Body members feel they have the necessary expertise to perform the Natural Resource Inventory.
3. A summary of this resolution shall be printed once in the Ocean County Observer and copies of the contract are available for review at the Municipal Clerk's Office.

Approved:


RUSSELL K. CORBY, MAYOR

[illegible]



PINE BEACH HOTEL

Plan of Pine Beach
New Jersey

Showing its relation to the waters of the Atlantic Ocean and Barnegat Bay, combining the balm of the Pines and the breezes of the Ocean. The most progressive Bungalow Resort on the New Jersey coast.

PINE BEACH REALTY CO.
SPRING LAKE, NEW JERSEY
OFFICE IN BOSTON, MASSACHUSETTS

LAKE WOOD

TOMS RIVER

NEW JERSEY SOUTHERN RAIL ROAD

TABLE 1.1

VEGETATION

Common Name

Pitch Pine
Virginia Pine
Eastern White Pine
Red Pine
Shortleaf Pine
Norway Spruce
Black Spruce
Eastern Red Cedar
Black Willow
Weeping Willow
Black Walnut
Sweet Birch
White Birch
Grey Birch
American Hornbeam
White Oak
Post Oak
Chestnut Oak
Swamp White Oak
Northern Red Oak
Black Oak
Scrub Oak
Mulberry
Tulip poplar
Sassafras
Sycamore
Black Cherry
Wild Apple
American Crabapple
Black Locust
Red Maple
Sugar Maple

Botanical Name

Pinus rigida
Pinus virginiana
Pinus strobus
Pinus resinosa
Pinus echinata
Picea abies
Picea mariana
Juniperus virginiana
Salix nigra
Salix alba tristis
Juglans nigra
Betula centa
Betula papyrifera
Betula populifolia
Ostrya virginiana
Quercus alba
Quercus stellata
Quercus prinus
Quercus bicolor
Quercus rubra
Quercus velutina
Quercus ilicifolia
Morus rubra
Liriodendron tulipifera
Sassafras albidum
Platanus occidentalis
Prunus serotina
Malus pumila
Malus domaria
Robinia pseudocaccia
Acer rubrum
Acer saccharum

Common Name

Norway Maple
Flowering Dogwood
American Holly
Bayberry
Mountain Laurel
Huckleberry
Inkberry
Blackberry
Crabapple
American Honeysuckle
Autumn Olive
Winterberry
Chokeberry
Virginia Creeper
Azalea sp.
Bradford Pear
Dogwood
Juniper sp.
Rhododendron
Wysteria
Forsythia
Roses
Greenbriar
Viburnums
Sheep Laurel
American Yew

Botanical Name

Acer platanoides
Cornus florida
Ilex opaca
Myrica pennsylvanica
Kalmia latifolia
Gaylussia baccata
Ilex glabra
Rubus sp.
Malus sp.
Ionicera japonicus
Eleangus umbellata
Ilex montana
Aronia sp.
Parthonocissus quiquifolia
Rhododendron sp.
Pyrus calleryana
Cornus sp.
Juniperus sp.
Rhododendron sp.
Wysteria sp.
Forsythia sp.
Rosa sp.
Smilax sp.
Viburnum sp.
Kalmia polifolia
Taxus sp.

TABLE 1.2

WILDLIFE

MAMMALS

Opposum
Eastern Mole
Eastern Cottontail
Grey Squirrel
Chipmunk
Red Squirrel
Woodchuck
White Footed Mouse
House Mouse
Meadow Mole
Muskrat
Raccoon
Striped Skunk
Gray Fox
River Otter

Didelphis marsupialis
Scalopus aquaticus
Sylvius floridanus
Sciurus carolinensis
Tamias striatus
Tamiasciurus judsonicus
Marmota monax
Peromyscus leucopus
Mus musculus
Microtus pennsylvanicus
Ondatra zibethicus
Procyon lotor
Mephitis mephitis
Urocyon cinereoagustus
Lutra canadensis

BIRDS

Canadian Goose
Mallard Duck
Bob White Quail
Spotted sandpiper
Mourning Dove
Common Flicker
Redbellied Woodpecker
Downy Woodpecker
Tree Swallow
Tufted Titmouse
Bluejay
Common Crow
Black capped chickadee
Housewren
Northern Mockingbird
American Robin
Woodthrush
Starling
Black Warbler
Yellow Warbler
Eastern Meadowlark
Redwinged Blackbird
Cardinal
Goldfinch
Osprey (Seahawk)
Herring Gull
Laughing Gull
Common Tern

Branta canadensis
Anas platyrhynchos
Colinus virginianus
Actitis macularia
Zenaidura macroura
Colaptes auratus
Centurus carolinus
Dendrocopos pubescens
Iridoprocne bicolor
Parus bicolor
Cyanocitta cristata
Cyanocitta cristata
Parus atricapillus
Troglodytes aedon
Mimus polyglottas
Turdus migratorius
Hylocichia guttata
Sturnus vulgaris
Miniotilta varia
Dendroica petechia
Sturnella magna
Agelaius phoeniceus
Richmondea cardinalis
Spinus tristis
Pandion haliaetus
Larus argentatus
Larus atricilla
Sterna hirundo

REPTILES

Eastern Boxturtle
Eastern Painted Turtle
Eastern Garter Snake
Northern Black Racer
Northern Diamondback Terrapin

Terrapene carolina
Chrysemys picta
Thamnophis sirtalis
Coluber constrictor
Malaclemys terrapin

AMPHIBIANS

Spotted Salamander
Red Backed Salamander
American Toad
Fowler's Toad
Green Frog
Bull Frog
Wood Frog

Ambystoma maculatum
Plethodon cinereus
Bufo americanus
Bufo woodhoosei fowleri
Rana catesbeiana
Rana clamitans
Rana sylvatica

FISH

Striped Bass
White Perch
American Eel
Tidewater silverside
Sheepshead minnow
Bullnose minnow
Weakfish
Snapper Bluefish
Millet
Herring
Mummichong

Roccus saxatilis
Roccus americanus
Anguilla rostrata
Menidia beryllina
Cyprinodon variegatus
Exocoetum maxillimum
Cynoscion regalis
Pomatomus saltatrix
Mugil cephalus
Clupea harengus
Fundulus heteroclitus

RESOLUTION 98-49

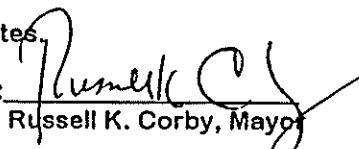
WHEREAS, the Pine Beach Environmental Commission has received grant funding to complete a Natural Resource Inventory, and

WHEREAS, the completed Natural Resource Inventory has been reviewed by the members of the Environmental Commission and has met with their approval:

NOW THEREFORE BE IT RESOLVED by the Mayor and Council of the Borough of Pine Beach, County of Ocean, that the Natural Resource Inventory as prepared by E. Eugene Cross Associates and the Pine Beach Environmental Commission be hereby accepted as the official Natural Resource Inventory for the Borough of Pine Beach, and this document shall be an integral part of the Borough's Planning process.

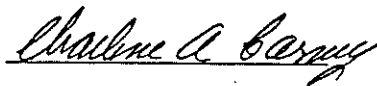
BE IT FURTHER RESOLVED that the Environmental Commission Chairman and Mayor are authorized to sign the necessary grant reimbursement forms, and the Chief Financial Officer is authorized to issue final payment to E. Eugene Cross Associates.

Approved: _____


Russell K. Corby, Mayor

CERTIFICATION

I, Charlene A. Carney, Municipal Clerk/Administrator of the Borough of Pine Beach, hereby certify the foregoing to be a true and accurate copy of a resolution duly adopted by the Governing Body this Thirteenth day of May, 1998.





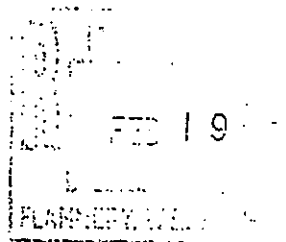
Christine Todd Whitman
Governor

State of New Jersey
Department of Environmental Protection
Division of Parks and Forestry
Office of Natural Lands Management
Natural Heritage Program
CN 404
Trenton, NJ 08625-0404
Tel. #609-984-1339
Fax. #609-984-1427

Robert C. Shinn, Jr.
Commissioner

February 14, 1997

Bryon DuBois
Flannery, Webb & Hansen, P.A.
1255 Route 70
Lakewood, NJ 08701



Re: Pine Beach Borough Environmental Resource Inventory

Dear Bryon DuBois:

Thank you for your data request regarding rare species information for the above referenced municipality in Ocean County.

The Natural Heritage Data Base does not have any records for rare plants, animals, or natural communities on the site. Attached is a list of rare species and natural communities which have been documented from Ocean County. If suitable habitat is present within the municipality, these species have potential to be present. If you have questions concerning the wildlife records or wildlife species mentioned in this response, we recommend you contact the Division of Fish, Game and Wildlife, Endangered and Nongame Species Program.

PLEASE SEE THE ATTACHED 'CAUTIONS AND RESTRICTIONS ON NHP DATA'.

Thank you for consulting the Natural Heritage Program. The attached invoice details the payment due for processing this data request. Feel free to contact us again regarding any future data requests.

Sincerely,

Elena A. Williams
Senior Planner

cc: Lawrence Niles
Thomas Hampton
NHP File No. 97-NJOCEA



State of New Jersey

DEPARTMENT OF STATE
TRENTON NJ 08625

CHRISTINE TODD WHITMAN
Governor

LONNA R. HOOKS
Secretary of State

Reply to:

Mailing Address:
New Jersey State Museum
Archaeology/Ethnology Bureau
CN 530
Trenton, NJ 08625-0530

Location:
New Jersey State Museum
205 W. State Street
Trenton, NJ 08625-0530

February 20, 1997

Mr. Bryon DuBois
Pine Beach Environmental Commission
418 Radnor Avenue
Pine Beach, NJ 08741

Re: Presence of Archaeological Resources
Borough of Pine Beach
Pine Beach, Ocean County, New Jersey

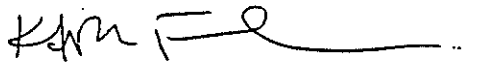
Dear Mr. DuBois:

We have checked our records for the above-referenced project and report the following:

Known archaeological resources appear to be located within the boundaries of the project site. There are known archaeological resources located within a two mile radius of the project site. A copy of your project map showing the locations of these sites as well as copies of the information from our files for each site are enclosed. An archaeological survey, by a professional archaeologist, would have to be conducted in order for an accurate assessment to be made of its archaeological significance.

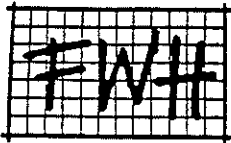
If we can be of further assistance, please do not hesitate to contact us.

Sincerely,


Karen Flinn
Registrar
Archaeology/Ethnology Bureau

KF:gg

CC: NJ Department of Environmental Protection
Historic Preservation Office



FLANNERY, WEBB & HANSEN, P.A.

CIVIL ENGINEERS • LAND SURVEYORS • SITE PLANNERS
LANDSCAPE ARCHITECTS • ENVIRONMENTAL CONSULTANTS

March 4, 1997

Pine Beach Environmental Commission
Municipal Building
Pennsylvania Avenue
Pine Beach, N.J. 08741

Re: Environmental Resource Inventory

Dear Members:

Enclosed please find two (2) letters from local government agencies regarding any historical resources within Pine Beach Borough.

Additionally, I have enclosed a copy of an Endangered and Threatened Species Search from the State of New Jersey for the project boundaries.

Should you have any questions or require additional information, please do not hesitate to contact this office.

Sincerely,


Bryon DuBois

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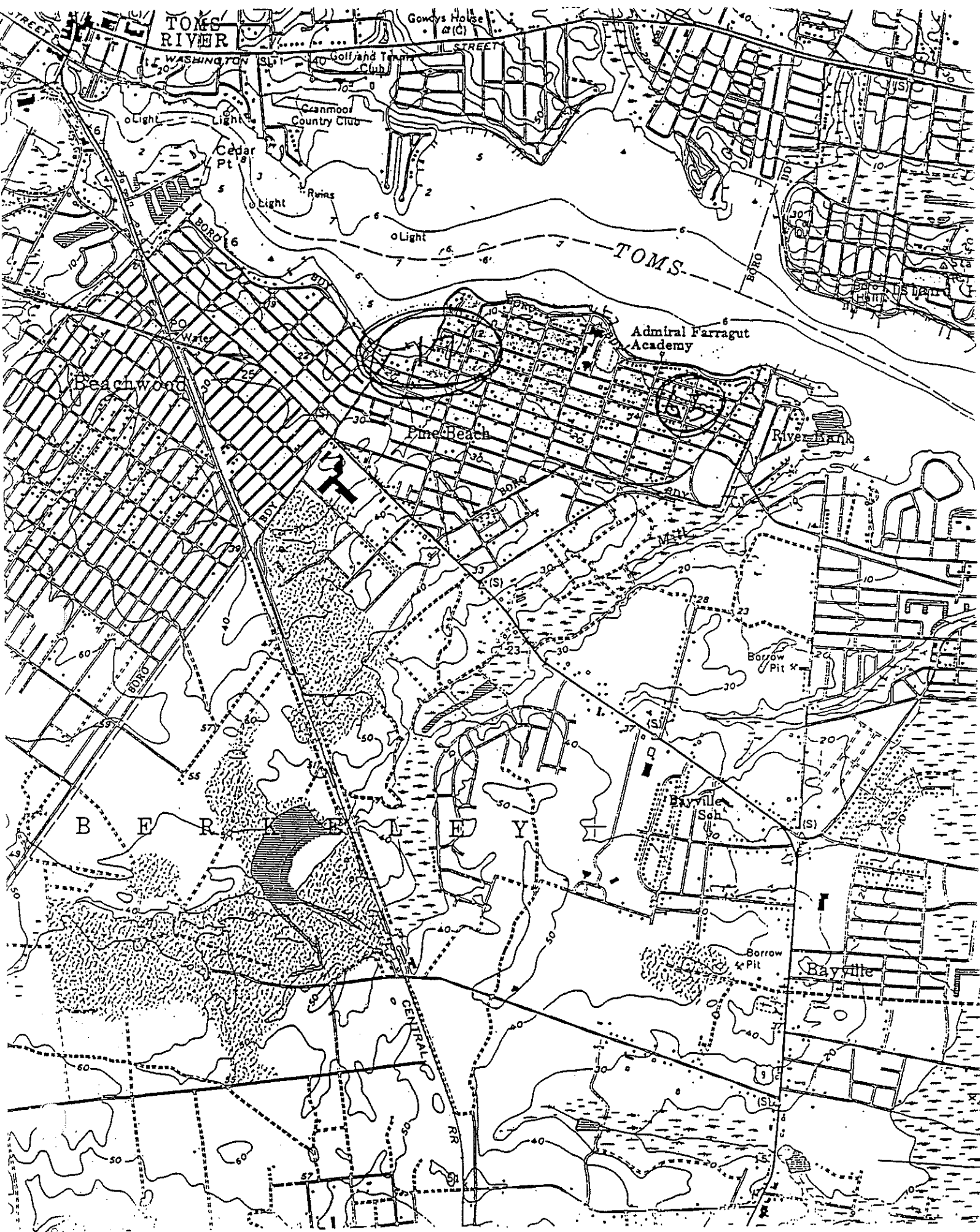
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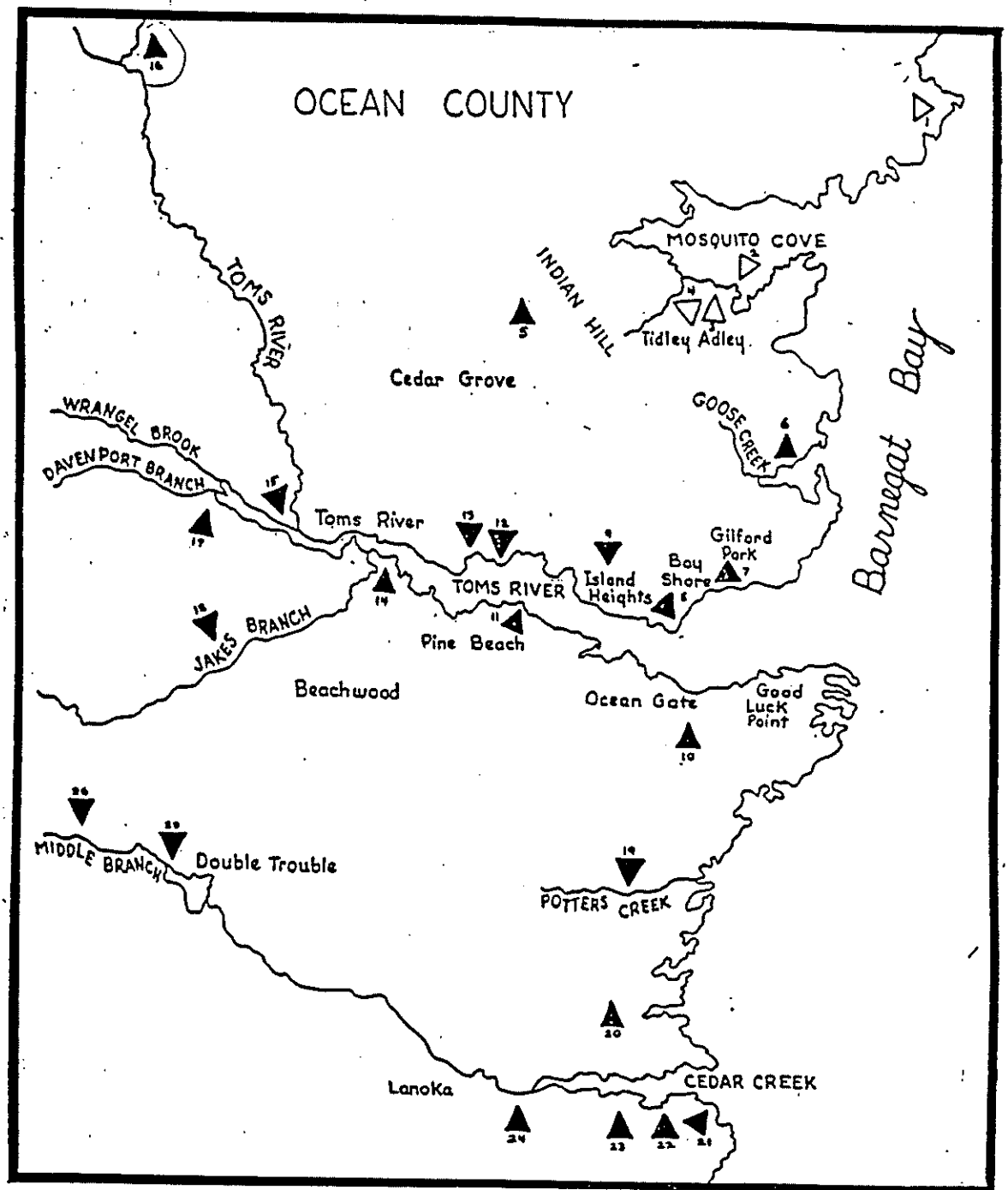
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NUMBER 1

JULY 1948





MAP 2. Indian Sites in Ocean County

spearpoint, $3\frac{3}{8}" \times 2" \times \frac{1}{4}"$, about 130 shale and argillite points, ranging from six-inch "fish spears" to small triangular "war points"; several hammerstones; two hoes; four celts; one broken grooved ax; one-half of a small bannerstone showing that the hole had been drilled from both sides, and potsherds bearing forty different designs. All were surface finds. That this site was an ideal location can now be seen by the two developments covering it. From a collector's viewpoint, a fine hunting-ground has succumbed to civilization. Bay Shore is really spoiled by a bulkhead the entire length of the waterfront. It was here that the finds were most prolific.

South and west of Gilford Park, separated by a small stream, lies Island Heights (Site 8; 33-2-6-5-7,8,9:6-7,8,9:8-1,2,3,5,6:9-1,2,3,4,5,6). This is a piece of land a little over a mile long by one-half mile wide, rising to a height of 57 feet above the river. When the Indians were here it was completely surrounded by water. Because of the scarcity of artifacts and sites, and its position next to the large site at Gilford Park, it seems that the island was reserved for a ceremonial or burial ground.

James Robinson, who was over ninety years old when he died about fifteen years ago, told Roy Gowdy that he was brought up on the island, his father having been the original owner. He said that there were two carved posts on top of the hill, like an entrance-way, when his father first arrived.

Site 9 is opposite the western end of the island where two small streams join (33-2-6-5-6,9). On a knoll on the west bank of one stream there were three humus rings which the residents used to call "wigwam rings." These rings were close enough to the Gilford Site to be affiliated with it, and they also help confirm my belief that the Indians reserved the hill for some special purpose.

Opposite the Gilford Park Site on the south point of the mouth of the river, there was a large camp site (No. 10) where Ocean Gate now stands (33-2-9-2-6,9:3-1,2,4,5,6,7,8,9:3-7-1-4,5,6,7,8,9). This extended from the small pond on the west of Ocean Gate to the meadows. Stone mortars, pestles and axes have been picked up in the field near the pond,

and I am told the collectors had a "field day" when the streets of Ocean Gate were cut through. One man told me that he had picked up enough to fill two quart jars. Charles Throckmorton of Ocean Gate had a large collection from the site. The early collectors did their work well though, because so far I have found but two jasper points and a large flake of beautiful green jasper along the beach. The site, although extensive, does not have the requisites for a permanent village. There is no shelter from the winds in winter, in summer it is extremely hot, and the soil is not so fertile as on the north side of the river. It may have been used by the inhabitants of the Gilford Site as a summer workshop for fishing and oyster-ing. 28-06-17. 28-06-32 28-06-5

Scattered finds have been made westward along the river to Pine Beach where we find Site 11, an extensive camp (33-2-5-9-4,5,6:6-7-4,7). This seems to have been an oyster-shucking ground, as it has more extensive shellheaps than the other sites so far visited along the river. The largest shell deposit was on the bank of a small cove, now filled and used as the athletic field of Admiral Farragut Academy, where Du Pont Hall now stands. The foreman in charge of building Du Pont Hall, at my request, kept an eye on the shellheap while they were excavating for foundations. He reported that nothing was found except shells. I am told that another large shellheap was encountered when the old Pine Beach Inn, now the Administration Building of the Academy, was erected. However, like Ocean Gate, many arrowpoints were found when the streets of Pine Beach were cut through. A burial was uncovered at the river end of Cedar Street and I have picked up three jasper points on Buehler's Point. There is a small shellheap exposed on the tip of the bluff near the summer house on the point.

As at Ocean Gate, Pine Beach has a corresponding village site on the north side of the river (33-2-5-6-4). Crossing from Buehler's Point to the cove between Cranmoor Point and Pumpkin Point, we land right on Site 12, a small shellheap. One day, while looking over the shells where someone had been trial-digging, I found several chips of yellow jasper

USGS;
TOMS RIVER
2nd
Pond
Gilford
Park
Chick
Cove

Action:

Site Registration Program
New Jersey State Museum
Bureau of Archaeology
205 W. State Street
Trenton, New Jersey 08625
(609)292-8594

NJSM Site No: 28-0c-65
Site Name: CEDAR AVE. SITE
Area: 55-2-6-7-4, 7, 8
EIS Status/
Nat'l Reg No:
USGS TOMS RIVER

County: OCEAN

Location: PINE BEACH BOROUGH
FOOT OF CEDAR AVE.

Type of Site: HABITATION (+ MAYBE BURIAL)

Period of Site (if known): WOODLAND

Cultural Affiliation(s) (if known):

Map Type:
N.J. ATLAS

Coord:

33-2-6-7-4, 7, 8

USGS TOMS RIVER 74° 9' 40" W
39° 56' 20" N

Owner's Name:

Address:

BOROUGH OF PINE BEACH

ALSO: MR. & MRS. T. BRETHWAITE, 817 RIVERSIDE DRIVE, PINE BEACH, N.J.

08741

Phone:

Owner's Attitude Toward Preservation:

BRETHWAITE'S ARE INTERESTED

Tenant's Name:

Address:

Previous Owner's Name:

Phone:

Address:

Surface Features:

RESIDENCES, LAWNS, GARDEN PLOTS

Vegetation Cover: Types: GRASS / PAVEMENT / RESIDENCE & OTHER

APPROX. Percentages: 50% / 20% / 30%

Water Source: Type: "PINE BEACH CREEK" Distance: RUNS THROUGH SITE
(NOW BURIED)

Soil Type: LOAMY SAND

Erosion: SITE IS NOW BURIED
UNDER FILL NEAR SHORE

Strata & Depth (if known):

Threat of Destruction: BY SEWER LINE ALONG RIVERSIDE DRIVE

Previous Work By Whom When Material Collected Where

Excavation

(UNKNOWN)

(NO DATE
GIVEN)

(SEE BELOW)

Survey

"A BURIAL WAS UNCOVERED AT THE RIVER

Surface Collecting

END OF CEDAR STREET...."

(WOOLEY 1948:8)

Photographs

Previous Designations: PINE BEACH (GENERAL DESIGNATION)

Recorder's Name: E. LARABEE

Address: HISTORIC SITES RESEARCH

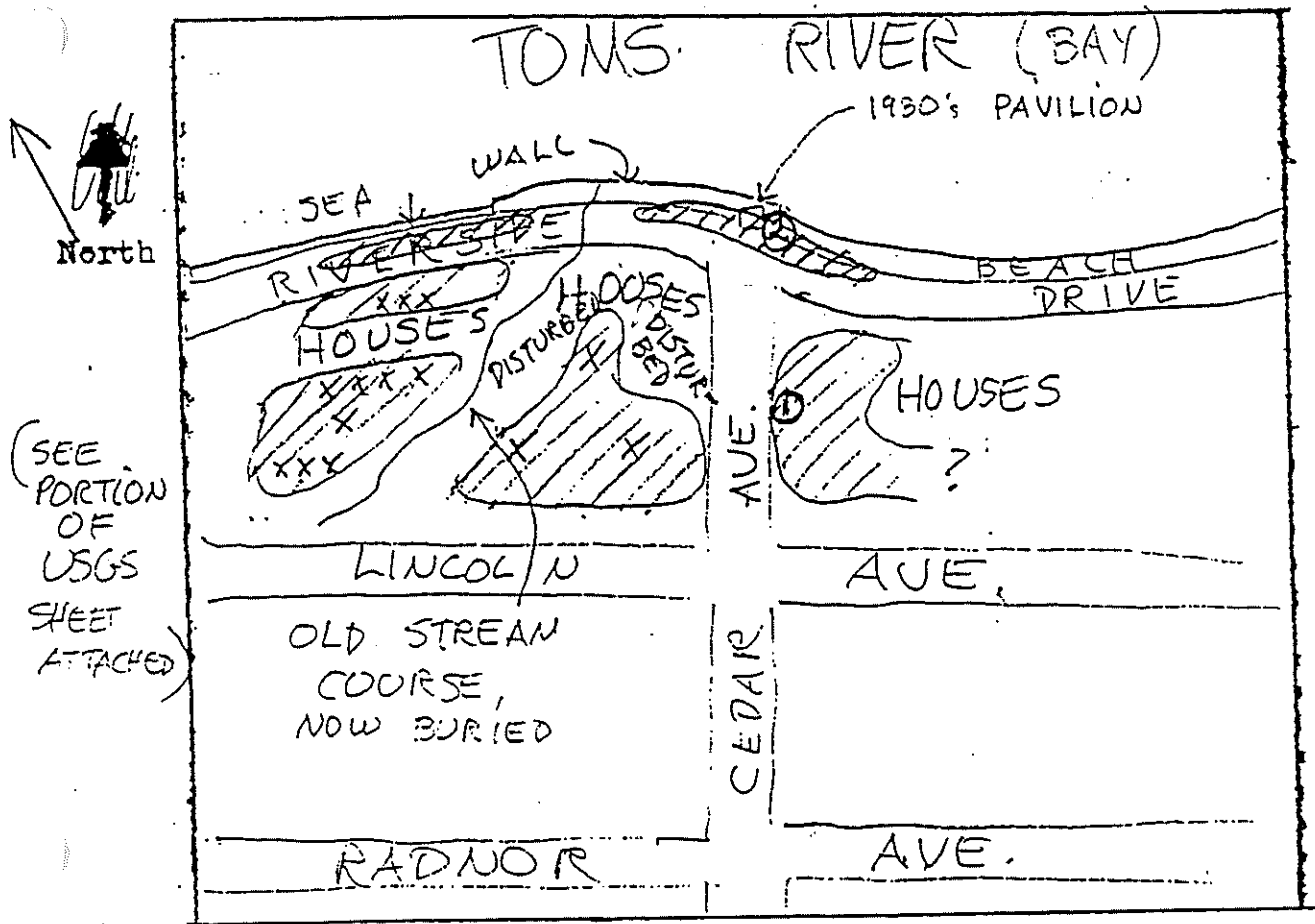
Phone: (609) 921-5107

over 27 AUG 1981

P.O. BOX 1286

DR. ... 08000

swamps, shorelines, and elevations (approx). Also show buildings and roads. Indicate the site location by enclosing the site area with a dotted line. Use a scale (approx) to indicate distance and dimensions.



Observations, Remarks, or Recommendations:

Scale: 1" = 200'

① = LEVANNA PROJ. PT.

② = INCISED SHERD

(HAVE PRODUCED VARIOUS STYLE SHERDS)

XX = REPORTED FIND AREAS, GARDENS & HOUSE FOUNDATIONS



= AREA OF SITE BELIEVED STILL INTACT 1981

References: Unpublished

approx Date

Published

Date

WILSON.

(N.D. - ca. 1979 or 1980)

WOOLEY

1948:9

(SEE BIBLIO. SHEET ATTACHED)

References

Cross, Dorothy

- 1956 Archaeology of New Jersey, Volume 1, Archaeological Society of New Jersey and the New Jersey State Museum, Trenton, N.J.

Woolley, Harold

- 1948 "Indian Sites in Ocean County", Archaeological Society of New Jersey Bulletin, Volume I, pp 4 -12.

Wilson, Budd

- n.d. Cultural Resource Survey Sewer System, Borough of Pine Beach, Ocean County, New Jersey. Prepared for Fellows, Read, and Weber, 310 Main Street, Toms River, New Jersey 18753.

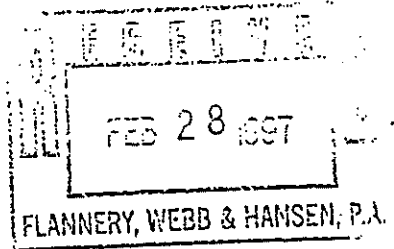


OCEAN COUNTY CULTURAL & HERITAGE COMMISSION

101 Hooper Avenue
P.O. Box 2191
Toms River, NJ 08754-2191
(908) 929-4779
Fax No. 908-506-5000

February 26, 1997

Byron DuBois
Pine Beach Environmental Commission
Flannery, Webb & Hansen, P.A.
P.O. Box 456
Lakewood, N.J. 08701



Dear Mr. DuBois:

Pine Beach lies in an historic resource district, one of the most heavily occupied areas by Indians on the south side of the Toms River.

When Arthur King surveyed and laid out the streets for the development, he picked up so many artifacts that he converted his carriage house into an Indian Museum. This collection was auctioned off after his death.

A burial site was found when the Pine Beach Hotel basement was dug in 1910. (I think that is Russell Hall today.) A partial hand hewn canoe was found among other items, including a piece of pottery which we call the "Pine Beach Bowl."

The western perimeter was a grove covered with oak trees where bald eagles nested.

I am enclosing an article written by Ella L. Ware in 1948 which describes some of her early memories of Pine Beach.

Sorry I responded so late to your request. The letter got buried.

Good luck with your project.

Sincerely,

Pauline S. Miller, Administrator

PSM:mh
Enc.



SPECIAL ASSISTANCE/ACCOMMODATIONS available upon request.

even the oil lamps were put up, whenever we went out after dark we carried lanterns to find our way. It was not until 1920 that electricity came to Pine Beach. The event was celebrated with a parade and speakers. Mr. John Mergenthaler and Mr. and Mrs. O. S. Haines were instrumental in staging the celebration. The Reverend George Smith gave the address.

The first grocery store and the first postoffice were in Mr. Henry Clayton's home on Linden Avenue.

There were eight or more trains a day, with a station agent here for many years. Mr. William Linnig was the first station agent. He planted the two trees and made flower beds on the railroad property. There was a signal tower on the far side of the tracks at the junction. Mr. Clayton spent many hours there as a signal man. Pine Beach station was called Island Heights Junction before Pine Beach was developed, because a spur railroad went over a bridge to Island Heights. A bridge tender on duty all day opened and closed the draw when the boats went up or down the river. Our second railroad station was at our end of the bridge. The bridge was a good place to tie up your boat, and crab. RIVER BR

In 1910 the Chapel was started by The Reverend and Mrs. August Pholman and some of the first residents. It was for any Christians who so desired to come and worship. For several years the Catholic Church held early Mass in the Chapel with Protestant Sunday School and Church Service following. Mr. Buckholz who gave the bell and the organ, also played the cornet for the Services. I played the organ. Mr. and Mrs. Hershberger gave the bench which is still used at the back of the Pulpit; also the screen. Miss Reister's group of girls gave the central lights. There were many more gifts—everyone wanted to help. Before the electric lights were put in, we burned gas. There was a quarter meter. Sometimes during the evening service the light would begin to grow dim and some one of the Trustees would tip-toe around asking for a quarter. For many years the chapel was the center of our community life. On Sunday it was used for Sunday School and Church, but on other days we had package parties there, fairs, novelty minstrels (children), a Princess Mary wedding, etc. With hard work plus many contributions we paid off the mortgage. It is now clear of debt. The Sunday School picnics at Sea Side Heights and the Metedeconk were especially enjoyable for young and old. In 1915-1916 Berkeley Township used the Chapel for a public school with Miss Blake, Miss Sturde-man and Miss Goebel as teachers—about twenty-five pupils. 1922

On the day of President Harding's funeral there was a service in the Chapel.

Early in Pine Beach history Mr. John Mergenthaler and Mr. John Thomas planned the Fourth of July celebrations: peanut scrambles, foot races, boat and swimming races and pie eating contests all started by a parade, a band and decorated cars.

The first year after the Inn opened, all the residents of Pine Beach were invited to attend the concerts on Saturday evenings. One Saturday Mr. and Mrs. Clyde Phillips gave their bird show in the Grille for the benefit of Pine Beach Chapel.

During the first few years a large sailboat, The Stroller, was tied up at the Inn pier and could be engaged for a day's trip down the bay.

All voting, tax paying, etc., had to be done in Bayville until 1925 when Pine Beach became a borough, with Mr. LeRoy J. Hutchinson as our first Mayor.

In 1915 the Pine Beach Yacht Club was formed by Mr. Charles Wheeler and Mr. W. L. Wilson, and jokingly called "The Sewing Machine Club" for the Wheeler and Wilson sewing machines then in use. It also became a community center giving wonderful sourkraut suppers, cold suppers and all kinds of fairs, entertainments, and musicals. One funny group was The Cheese Club, where the men wore long linen dusters, false beards, large straw hats, and cut up all kinds of capers at "The Old Country Fair." One project was a beauty contest which netted a goodly sum of money but caused many hard feelings. After the roof was raised to make a second floor, the room was decorated in Japanese style with long black and gold scrolls around the walls and Japanese lanterns over the lights. Very beautiful. Miss Mary Scheunemann was chairman of the decorating committee. A Japanese Tea followed soon after the opening with the girls dressed in kimonos. Dr. Earl Rice was quite a comedian and in demand upon every occasion. During World War I weekly community singing was held at the club house—everybody enjoyed it very much.

In the early years there were several boats plying between Toms River and Sea Side Park, stopping at each town on the way to take on or let off passengers. "Josie Rogers" was the first one I remember. Captain Ira Lambert's "Ariella" and "Dorianna" (two-deckers) were the most notable. Later, Captain Hugo Harms built a boat for competition with the Lambert line. Passengers on the boats had many a thrill as each captain tried to get the inside way to the dock to get the passengers

AND ALL
RICE

waiting to board a boat. Later Mr. Harms used the James Monroe, a one-deck boat, to take parties down the bay, fishing.

We would go to Toms River on the morning boat, do our marketing in the hour before the boat came back. Or we could go over to Island Heights, taking the train at River Bank station and going over the bridge, or by the "Ariella." Better still, we could go by boat all the way to Sea Side Park, have a nice ride on the river and bay, see the ocean, do our marketing and have a nice boat ride home. Also we could go by train to Sea Side Park. Going on the train to the Pennsylvania Railroad pier on Barnegat Bay was a nice outing: taking fish and crab bait, tackle and nets; also lunch. It is surprising how hungry one gets out over the water. Train service was just right. We had plenty of transportation in those days, but the advent of the automobile in so many homes finally put the others out of business.

At many of the public docks, captains had party boats (sail and motor). A party could hire a boat for the day and spend it sailing or fishing, or sailing to Barnegat Light. In the very first days of Pine Beach the boats did not have motors and depended solely on the wind. It was grand sailing when the wind blew but when it died down we never knew when we would get home. One moonlight night we sailed down the bay with a good breeze, but when we got back in the river the wind dropped. We were becalmed! The poor captain walked from one end of the boat to the other poling the boat all the way to Pine Beach dock. We all felt sorry for him but he would not let any one help him. It was after midnight when we got home.

Long tramps and walks through the woods on the old wagon roads were part of our enjoyment. Also the picking of huckleberries, beach plums and cranberries for preserving.

One evening, our near neighbors had two maiden ladies visiting them. No men were at home when a bat invaded the house. Such a commotion! My fourteen year old nephew and his friend, who were visiting us, were called in to help. The boys were armed with brooms. When the bat flew up to the second floor the boys and brooms followed. Oh! the noise! I thought the whole house would be ruined. But they got the bat out and all was peace once more.

Bathing, swimming, rowing, canoeing were also part of our early activities, as well as now.

All of these things were our interests and amusements in the first days and not the least was meeting the trains with friends coming or going. The station was a busy place then.

Prepared by:



E. Eugene Oross Associates

and

Rehabco, Inc.

470 Mantoloking Road
Brick, N.J. 08723

(732) 477-7750
fax (732) 920-9649