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## 3.0 Existing Conditions

Chapter 3 describes the existing environment (year 2004) or setting within ½-mile of each of the seven port sites identified on page 1-2. The descriptions of existing conditions are based on available data and information, supplemented by limited field reconnaissance. For each port site, brief descriptions (as applicable) of the following environmental categories are provided:

- Land use/zoning;
- Community facilities and services;
- Cultural resources;
- Open space/parklands;
- Urban design/visual resources;
- Demographics and environmental justice;
- Neighborhood character;
- Traffic and transportation conditions;
- Air quality;
- Noise;
- Natural resources; and
- Hazardous materials.

This description of existing conditions lays the foundation for environmental review of future port improvement and associated transportation improvement projects. The information for each of the environmental categories will need to be updated for any analyses of future projects to appropriately describe conditions existing at that time.

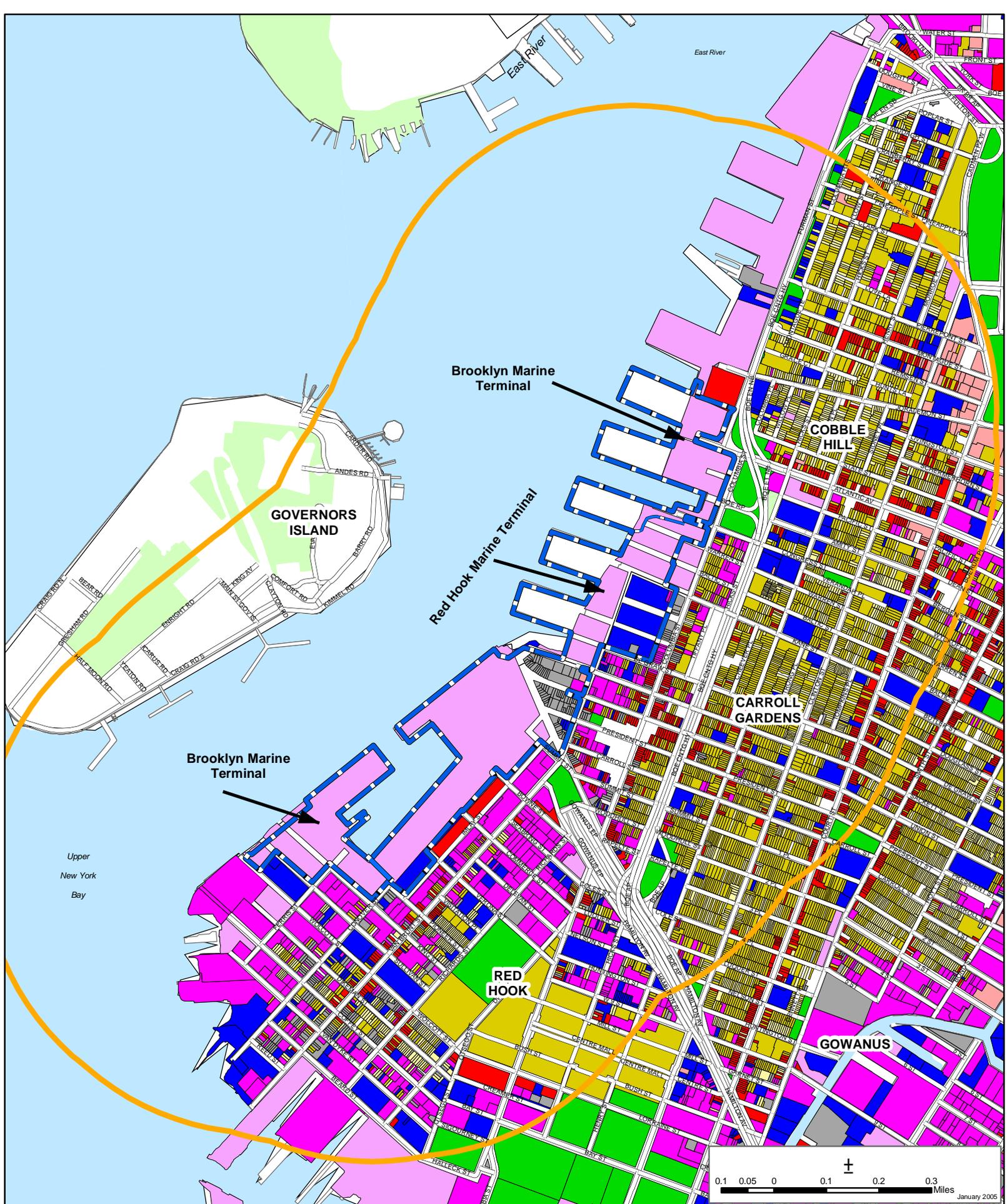
### **A. RED HOOK/NORTH BROOKLYN MARINE TERMINAL, RED HOOK, BROOKLYN**

Red Hook/North Brooklyn Marine Terminal (RH/NBMT) is located in the Red Hook neighborhood of Brooklyn. The port facility is sited along Brooklyn's northwestern waterfront, extending from Atlantic Avenue on the north, to Wolcott Street on the south (Figure 3-1). RH/NBMT comprises Brooklyn Piers (6, 7, and 12) and the Red Hook Container Area (Piers 9A through 11). The site is currently used for the shipping, storage, and repackaging of various products including coffee, cocoa, plywood, and lumber. The Port Authority of New York and New Jersey (Port Authority) has administrative offices and a garage at the site.

The Red Hook neighborhood is located on the Red Hook peninsula and is surrounded by Gowanus Bay, Erie Basin, and Buttermilk Channel, all of which connect to Upper New York Bay and the East River. The neighborhoods of Cobble Hill and Carroll Gardens are located to the east of Red Hook, and Brooklyn Heights borders to the north.

As shown on Figures 3-2 and 3-3, Red Hook is a mixed-use neighborhood combining light-to-heavy manufacturing zones with residential uses that increase in density from west to east (from R5 to R6). The waterfront is primarily available only for commercial and manufacturing uses, and public access to the waterfront is limited to Louis J. Valentino Jr. Park and Pier.





**Legend**

- |                           |                               |                        |
|---------------------------|-------------------------------|------------------------|
| 1-2 Family Residential    | Commercial                    | Parks/Open Space       |
| Multi-Family Residential  | Public Facility/Institutional | Transportation/Utility |
| Warehousing/Manufacturing | Office                        | Vacant                 |

Terminal Boundary  
 1/2 Mile Buffer

0.1 0.05 0 0.1 0.2 0.3 Miles  
 January 2005

**Figure 3-2: Red Hook/North Brooklyn Marine Terminal Land Use**



According to the 2000 U.S. Census, approximately 50,000 people live within ½-mile of RH/NBMT. The population is predominately non-Hispanic White (60 percent), while African-Americans make up an additional 14 percent, and Asians comprise over 4 percent. Nineteen percent of the community is Hispanic/Latino<sup>1</sup> (Table 3-1). Incomes earned throughout the area vary significantly, from just over \$10,000 to over \$110,000. Of the 3,325 households within ½-mile of the port site, 14 percent were below the poverty level, and of the approximately 50,000 residents, nearly 18 percent lived below the poverty level. Unemployed persons totaled 1,680 or 4 percent of the population 16 years of age and older (Table 3-2).

The visual character of the Red Hook neighborhood is dominated at its eastern boundary by the Brooklyn Queens Expressway/Gowanus Expressway/I-278 (BQE), which runs north-south and parallel to the port site. The roadway is elevated in this area and obstructs views, most noticeably at Atlantic Avenue. In the northern section of the neighborhood, between the BQE and the waterfront, the area is primarily dedicated to services supporting the port, including warehouses, docks with large cranes and cargo storage containers, and abandoned in-street railroad tracks. To the south the visual landscape is dominated by the Red Hook Houses, the BQE's elevated structure, three- to four-story multi-family houses and small-scale commercial strips. In comparison, Cobble Hill and Carroll Gardens to the east, as well as Brooklyn Heights to the north, include less dense streetscapes characterized by single-family houses.

The neighborhood surrounding RH/NBMT boasts several community, open space, and cultural resources that are located primarily south and west of the site. These resources are listed in Table 3-3 and shown on Figure 3-4.

The RH/NBMT neighborhood includes one historic building and four notable historic districts. The Fire Brick and Clay Retort Building is located at 76-78 Van Dyke Street and is the neighborhood's first designated New York City landmark building. Cobble Hill Historic District, which is bounded roughly by Atlantic Avenue, Hicks Street, DeGraw Street, and Court Street, is significant for its historic associations during the American Revolution and its history as a desirable residential area during the nineteenth century. Boreum Hill Historic District is an architecturally significant residential neighborhood comprised of approximately 250 mid-block century townhouses and several small-scale commercial structures built between 1845 and 1890. The district is bounded roughly by Pacific, Hoyt, DeGraw, and Court streets. Carroll Gardens Historic District is architecturally significant as a largely intact, cohesive residential neighborhood containing distinctive examples of popular late nineteenth century architectural styles. Smith, Hoyt, First, and President streets provide the general boundaries of the district. The Brooklyn Heights Historic District, which contains many private and public homes that display the various popular architectural styles of the nineteenth century, is bounded by Atlantic Avenue, Fulton Street, Furman Street, and Camden Plaza West. The four historic districts are all listed on the National Register of Historic Places.

The Brooklyn Battery Tunnel provides vehicular access between the Red Hook area and Manhattan, while the BQE serves as the area's regional roadway. Transit services within Red Hook are found at the subway station at Smith and 9<sup>th</sup> Streets, include the F and G trains, as well as four bus lines: B61, B63, B71, and B77. Red Hook's industrial businesses rely on trucking to move goods and freight into and out of the area. Since Hamilton Avenue offers a direct route between RH/NBMT and both the Brooklyn Battery Tunnel and the BQE, this road carries the greatest percentage of trucks accessing the port area. However, port-related truck traffic on Hamilton Avenue accounts for less than 4 percent of the roadway's total volume, indicating port-related truck traffic is a small percentage of total vehicular traffic.

<sup>1</sup> Hispanic/Latino was counted as a separate racial category by the 2000 U.S. Census.

TABLE 3-1: RH/NBMT – RACIAL CHARACTERISTICS

Census Tract*	Total Population	Selected Race and Ethnicity (Non-Hispanic)										Hispanic/Latino**	
		White		Black or African-American Alone		American-Indian, Alaskan Native Alone		Asian Alone		Native Hawaiian/ Other Pacific Islander Alone			
		Population	Percentage	Population	Percentage	Population	Percentage	Population	Percentage	Population	Percentage	Population	Percentage
3.01	5,036	4,027	80.0%	333	6.6%	4	0.1%	207	4.1%	3	0.1%	352	7.0%
3.02	284	237	83.5%	12	4.2%	0	0.0%	7	2.5%	0	0.0%	20	7.0%
5	6,154	5,011	81.4%	239	3.9%	7	0.1%	335	5.4%	1	0.0%	384	6.2%
7	3,682	2,835	77.0%	254	6.9%	0	0.0%	214	5.8%	5	0.1%	289	7.8%
9	2,178	1,603	73.6%	129	5.9%	2	0.1%	177	8.1%	0	0.0%	169	7.8%
43	2,942	1,220	41.5%	612	20.8%	0	0.0%	159	5.4%	0	0.0%	778	26.4%
45	3,444	2,808	81.5%	67	1.9%	1	0.0%	173	5.0%	0	0.0%	256	7.4%
47	1,120	470	42.0%	161	14.4%	1	0.1%	83	7.4%	0	0.0%	352	31.4%
49	2,593	1,551	59.8%	229	8.8%	3	0.1%	304	11.7%	0	0.0%	377	14.5%
51	2,093	1,098	52.5%	133	6.4%	4	0.2%	163	7.8%	0	0.0%	581	27.8%
57	1,631	366	22.4%	174	10.7%	3	0.2%	16	1.0%	0	0.0%	976	59.8%
59	1,099	206	18.7%	181	16.5%	6	0.5%	13	1.2%	0	0.0%	626	57.0%
63	1,821	1,320	72.5%	54	3.0%	4	0.2%	65	3.6%	2	0.1%	270	14.8%
65	5,136	4,118	80.2%	132	2.6%	1	0.0%	143	2.8%	5	0.1%	581	11.3%
67	3,500	2,791	79.7%	57	1.6%	0	0.0%	105	3.0%	0	0.0%	393	11.2%
85	7,278	95	1.3%	3,979	54.7%	29	0.4%	24	0.3%	1	0.0%	3,084	42.4%
5	2	2	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<b>Study Area Total</b>	<b>49,993</b>	<b>29,758</b>	<b>59.5%</b>	<b>6,746</b>	<b>13.5%</b>	<b>65</b>	<b>0.1%</b>	<b>2,188</b>	<b>4.4%</b>	<b>17</b>	<b>0.0%</b>	<b>9,488</b>	<b>19.0%</b>

Source: United States Bureau of the Census. 2000 Census Summary File 1 and Summary File 3.

\* Located either partially or entirely within ½ mile of site

\*\* Hispanic/Latino was counted as a separate racial category in the 2000 U.S. Census

**TABLE 3-2: RH/NBMT – SELECTED INCOME AND POVERTY CHARACTERISTICS**

Census Tract*	Households				Individuals			
	Total Number of Households	1999 Median Household Income	Households Below the Poverty Level	% of Households Below the Poverty Level	Individuals Below the Poverty Level	% of Individuals Below the Poverty Level	Unemployed Persons 16 Years and Older	% Unemployed Persons 16 Years and Older
3.01	2386	\$83,739	81	3.4%	867	17.3%	144	3.2%
3.02	115	\$112,414	14	12.2%	33	10.4%	0	0.0%
5	3,788	\$65,013	292	7.7%	426	7.1%	249	4.6%
7	1,815	\$66,213	122	6.7%	248	7.4%	126	4.1%
9	1,136	\$79,201	133	11.7%	289	13.4%	57	2.9%
43	1,064	\$56,429	146	13.7%	300	13.6%	43	1.6%
45	1,743	\$68,182	116	6.7%	196	5.7%	33	1.1%
47	506	\$49,427	94	18.6%	211	20.3%	36	4.3%
49	991	\$62,344	133	13.4%	204	10.2%	25	1.1%
51	970	\$51,767	115	11.9%	216	10.0%	93	4.7%
57	608	\$32,563	135	22.2%	359	22.1%	25	2.2%
59	420	\$21,674	85	20.2%	389	36.3%	40	5.4%
63	905	\$60,274	53	5.9%	128	7.3%	68	4.5%
65	2,583	\$62,049	225	8.7%	461	9.0%	78	1.7%
67	1,662	\$70,536	80	4.8%	185	5.3%	95	3.2%
85	2,777	\$10,372	1501	54.1%	3944	54.6%	568	11.8%
5	1	N/A	0	0.0%	0	0.0%	0	0.0%
<b>Study Area Total</b>	<b>23,470</b>	<b>N/A</b>	<b>3,325</b>	<b>14.2%</b>	<b>8,456</b>	<b>17.6%</b>	<b>1,680</b>	<b>4.0%</b>

Source: United States Bureau of the Census. 2000 Census Summary File 1 and Summary File 3.

\* Located either partially or entirely within ½ mile of site

N/A - Not Available

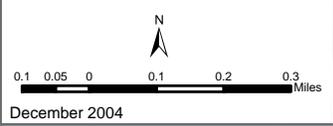
**TABLE 3-3: RH/NBMT – COMMUNITY, RECREATIONAL/OPEN SPACE, AND HISTORIC RESOURCES**

Map Key*	Name	Address
<b>Community Facilities</b>		
1	Brooklyn Public Library -- Red Hook Branch	7 Wolcott Street
2	PS 125 -- The Patrick F. Daly School	71 Sullivan Street
3	PS 27 - The Agnes Y. Humphrey School	27 Huntington Street
4	PS 372K at PS 27	27 Huntington Street
5	Salvation Army Fiesta Day Care Center	76 Lorraine Street
6	South Brooklyn Community High School	173 Conover Street
7	Food First Conover House - Provides medical care for AIDS/HIV and TB infected persons, feeds the hungry, homeless housing, and emergency shelter for domestic violence victims	165 Conover Street
8	Long Island College Hospital - A 516-bed teaching hospital	339 Hicks Street
9	Mercy Home for Children - Dedicated to serving persons who are developmentally disabled	104 Visitation Place
10	Narco Freedom, Inc. - Services include Alternatives Adult Treatment Program, Key Extended Entry Program (K.E.E.P.), Methadone Maintenance Treatment Program, Neighborhood and Family Community Health Center	134 Van Dyke Street
11	New York Fire Department Engine Company 202/Ladder Company 101 (Red Hook Raiders)	31 Richards Street
12	New York Police Department -- 76th Precinct	191 Union Street
13	Police Athletic League's Miccio Center - Offers arts & crafts, homework help, music and dance, sports, computer classes, and a summer day camp.	110 West 9th Street
14	Red Hook Community Justice Center	88 Visitation Place
15	Red Hook Rise - Provides programs including basketball, baseball, touch football, flag-football, a basketball camp, performing and creative arts including dance, art and design clubs.	481 Van Brunt Street
16	Red Hook Senior Center - Services include hot congregate meals, benefit and entitlement counseling, information and referrals, education and recreational activities, and Food Stamps outreach	6 Wolcott Street
<b>Recreational/Open Space</b>		
17	Coffey Park - basketball courts and playground equipment	Richards and Pioneer Streets
18	Dimattina Playground - playground equipment, dog run	Rapelye, Hicks, Coles Streets
19	Louis J. Valentino, Jr. Park and Pier - esplanade, benches, views of Upper New York Harbor and the East River	Van Dyke Street, Ferris Street, & Coffee Street
20	Brooklyn Bridge Park - Park currently being planned	(From Manhattan Bridge to Atlantic Ave, including Piers 1-5)
<b>Historic Resources</b>		
21	Fire Brick and Clay Retort Building	76-86 Van Dyke St.
22	Cobble Hill Historic District	Atlantic Avenue, Hicks Street, DeGraw Street, Court Street
23	Boerum Hill Historic District	Pacific Street, Hoyt Street, Nevins Street, Wycott Street
24	Carroll Gardens Historic District	Smith Street, Hoyt Street, 1 <sup>st</sup> Street, President Street
25	Brooklyn Heights Historic District	Atlantic Avenue, Fulton Street, Furman Street, Camden Plaza West

Source: ESEC, 2004.

Note: See Figure 3-4

\* Within ½ mile of site.



**Legend**

- Terminal Boundary
- Historic Zone Boundary
- 1/2 Mile Buffer

**Figure 3-4: Red Hook/North Brooklyn Marine Terminal: Community, Recreational/Open Space, and Historic Resources**

RH/NBMT is located in the New York-New Jersey Metropolitan Region, which is designated by the USEPA as a non-attainment area for ozone and PM<sub>2.5</sub>, and a maintenance area for CO. The area is designated as being in attainment for all of the other pollutants.

The latest ambient air quality data were collected in 2004 by the NYSDEC at monitoring stations located at Flatbush Avenue between Tillary and Johnson Street and at 424 Leonard Street in Greenpoint, Brooklyn. The data showed CO, PM<sub>2.5</sub>, and PM<sub>10</sub> levels that comply with National Ambient Air Quality Standards (NAAQS).

In addition to port-related activities, the principal sources of noise within and immediately surrounding RH/NBMT are motor vehicles and trucks traveling on the BQE (elevated) and Hamilton Avenue (at-grade). Land uses, including residences that are adjacent or proximate to roadways, are exposed to relatively constant noise from these vehicles. The majority of residences in the immediate vicinity of the port are buffered by warehousing, manufacturing, and commercial facilities, with the exception of residences located along Columbia Street, from roughly Congress to Degraw streets, and along Degraw Street, between Columbia and Van Brunt streets.

Although the existing conditions in each Port site's vicinity are described separately in this chapter, the entire New York/New Jersey Harbor region is interconnected ecologically. Water and air quality at one site may influence the others depending on weather and tide conditions. Ecological communities are similar among port sites and biota move among sites using available habitats both at and between port sites.

Marine species protected by federal law may be found at all sites; 13 finfish species, three shark, and three skate species are managed throughout the Harbor and many of its tributaries. Different life stages of these species move among sites foraging, escaping from predators, and during seasonal migrations. Many other species are ubiquitous and may move among available habitats depending upon the availability of food, shelter, and spawning sites.

Over 240 species of wildlife (mammals, birds, reptiles and amphibians) have been identified in the area (Kerlinger 2004; Walsh et al. 1999, JJR 1990). Most birds are migratory passing through the area on their way to nesting areas in the spring and on their way back to overwintering areas in the fall. Migrants, transients and post-breeding wanderers pass through the area using suitable habitat for resting and foraging.

Ecological communities and habitats at each of the Port sites were documented during site visits conducted in fall of 2004. Ecological communities were characterized in accordance with the descriptions provided in *Ecological Communities of New York State* (Edinger, et. al., 2002). The natural habitats of the RH/NBMT and surrounding area have been modified by human activities to support industrial and port uses. As a result, little natural habitat remains at the port site. Small patches/strips of unpaved ground with limited vegetation (Urban Vacant Lot) can be found throughout the site. The interface between the port and the harbor is a hardened shoreline of bulkhead and riprap. Littoral (waters that range in depth between mean low water (MLW) and six feet below MLW) and sublittoral (waters that extend from six feet below MLW and deeper) habitats comprise the interpier and near-shore open water habitats. Consistent with the limited natural habitat in the area, few wildlife species were observed at RH/NBMT during a field visit (September/October 2004). The sharp-shinned hawk (*Accipiter striatus*), a special concern species in New York, was identified on-site. As it migrates through, this species may forage on small birds in the limited on-site habitat, but is not likely to nest in the area. In addition, several species adapted to urban environments were observed, including ring-billed gulls, herring gulls, rock doves, mourning doves, song sparrows, and white-throated sparrows.

Several protected marine species are located throughout the New York/New Jersey Harbor and may occur at Port sites (Table 3-4). Species under the jurisdiction of NMFS are not expected to occur in the vicinity of Port Newark, Port Elizabeth and Howland Hook Marine Terminals, except as occasional transients.

Federally protected marine species may be found in the vicinity of Port Jersey, the Peninsula at Bayonne Harbor, Red Hook and South Brooklyn Marine Terminals (NMFS 2005). The shortnose sturgeon, a state and federally listed endangered species has been collected, on occasion, in deep-water habitats in the New York/New Jersey Harbor. This migratory species' primary habitat lies up river from the Harbor in the channels and deep-water habitats of the Hudson River from Haverstraw Bay upriver to the Federal dam in Troy. Of the protected sea turtles, juvenile Atlantic ridley and adult loggerhead sea turtles enter the New York/New Jersey Harbor and bays in the summer and fall. Green turtles and leatherback turtles may use the higher salinity areas of the Harbor seasonally. There is no nesting activity in New York Harbor Estuary, for any of these sea turtles.

**TABLE 3-4: STATUS OF PROTECTED MARINE SPECIES IN THE NEW YORK/NEW JERSEY HARBOR**

Common Name	New York	New Jersey	Federal
Atlantic Ridley Turtle	Endangered	Endangered	Endangered
Green Turtle	Threatened	Threatened	Threatened
Leatherback Turtle	Endangered	Endangered	Endangered
Loggerhead Turtle	Threatened	Endangered	Threatened
Shortnose Sturgeon	Endangered	Endangered	Endangered

Source: NMFS December 13, 2004.

According to the New York Natural Heritage files and the United States Fish and Wildlife Service (USFWS), with the exception of occasional transients upland, no threatened, endangered, or special concern species have been identified on or adjacent to the port site (NYDEC 2004). In addition, no significant state or federal habitat is located on or adjacent to the RH/NBMT (USFWS 2004a).

Under the authority of Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), National Marine Fisheries Service (NMFS) has identified Essential Fish Habitat (EFH) in the Northeastern United States for some species and life stages of fish, shellfish, and mollusks (NMFS 2004a). Species and life stages with habitat at port sites are presented in Table 3-5 (NMFS 2004b). A recent EFH Assessment and an Enhancement Program were developed by the US Army Corps of Engineers for the channels leading to existing port sites (USACE 2004).

In addition to the finfish species noted in Table 3-5, NMFS has identified EFH for the clearnose skate (*Raja eglanteria*), little skate (*Leucoraja erinacea*), and winter skate (*Leucoraja ocellata*) in the vicinity of the port sites (NMFS 2004c). In the past, NMFS has requested that striped bass (*Morone saxatilis*) and Atlantic sturgeon (*Acipenser oxyrinchus*) be added to EFH assessments prepared for projects within the NY/NJ Harbor region even though these species are not managed under the authority of MSFCMA. The list of federally managed species and their EFH are updated as additional information about a particular species' life history or population status changes. At such time as any project is proposed, the lead agency should review the status of EFH and the federally and state managed species to obtain the current designations.

Freshwater wetlands depicted on the NYSDEC Wetland Map (Jersey City Quadrangle) or the National Wetland Inventory (NWI) Map (Jersey City Quadrangle) are not located within or immediately adjacent to RH/NBMT (Figures 3-5 and 3-6). Interpier and basin areas located adjacent to the site are classified as estuarine, subtidal, unconsolidated bottom, excavated (E1UBLx) wetland on the NWI map and a littoral zone on New York tidal wetland maps (Nos. 582-502, 582-504 and 584-504).



0 0.05 0.1 0.2  
Miles

**Legend**  
State Wetland

Figure 3-5:  
State Wetlands Map  
Red Hook/North Brooklyn Marine Terminal

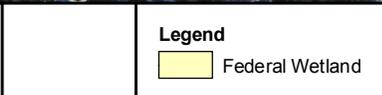
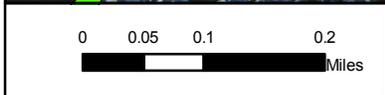
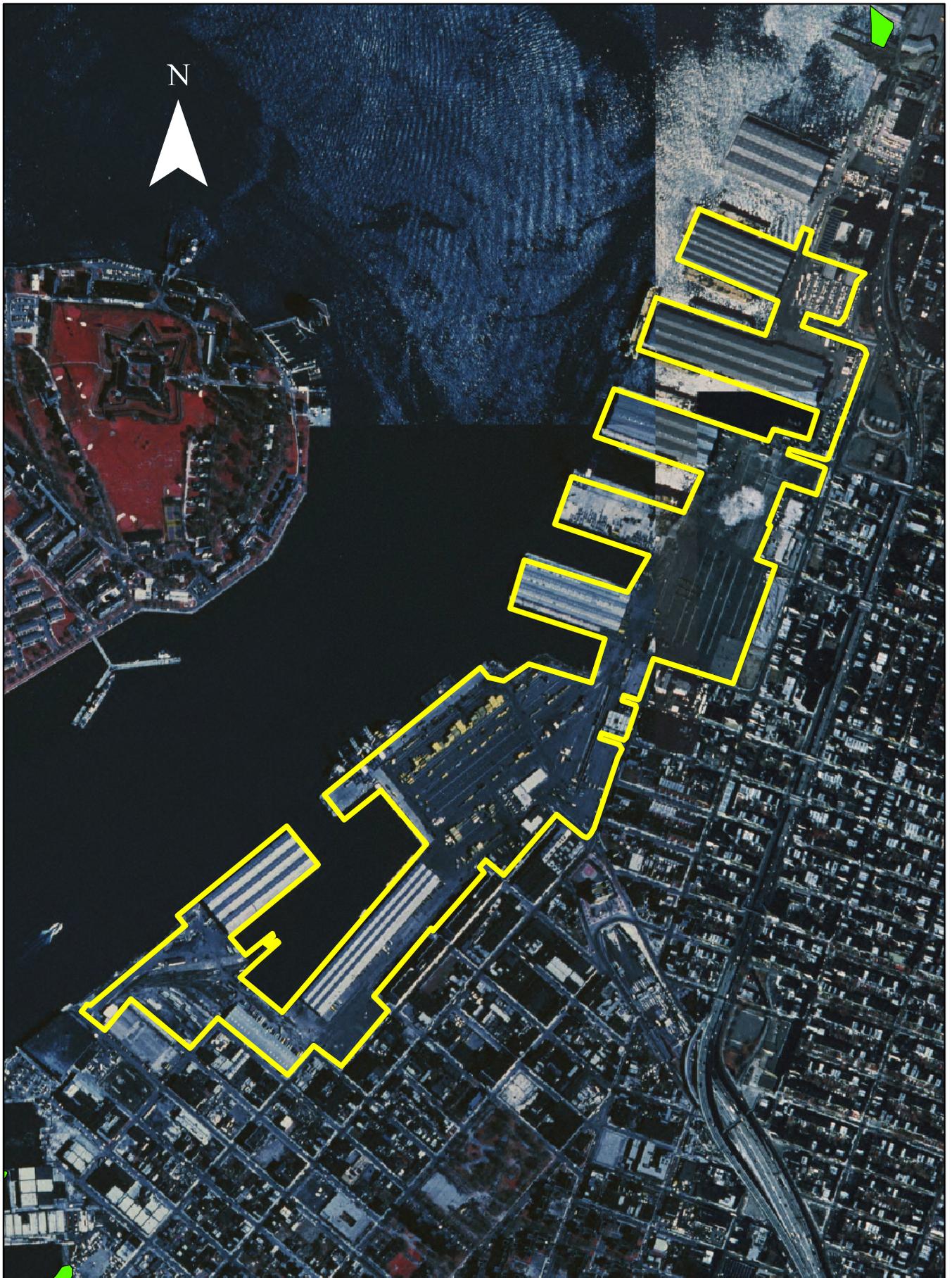


Figure 3-6:  
Federal Wetlands Map  
Red Hook/North Brooklyn Marine Terminal

**TABLE 3-5: FEDERALLY MANAGED FINFISH SPECIES WITH EFH HABITAT**

Species	Life Stage				
	Eggs	Larvae	Juveniles	Adults	Spawning Adults
Red hake ( <i>Urophycis tenuis</i> )		M,S	M,S	M,S	
Winter flounder ( <i>Pseudopleuronectes americanus</i> )	M,S	M,S	M,S	M,S	M,S
Windowpane flounder ( <i>Scophthalmus aquosus</i> )	M,S	M,S	M,S	M,S	M,S
Atlantic sea herring ( <i>Clupea harengus</i> )		M,S	M,S	M,S	
Bluefish ( <i>Pomatomus saltatrix</i> )			M,S	M,S	
Butterfish ( <i>Peprilus triacanthus</i> )		M	M,S	M,S	
Atlantic mackerel ( <i>Scomber scombrus</i> )			S	S	
Summer flounder ( <i>Paralichthys dentatus</i> )		F,M,S	M,S	M,S	
Scup ( <i>Stenotomus chrysops</i> )	S	S	S	S	
Black sea bass ( <i>Centropristus striata</i> )			M,S	M,S	
King mackerel ( <i>Scomberomorus cavalla</i> )	X	X	X	X	
Spanish mackerel ( <i>Scomberomorus maculatus</i> )	X	X	X	X	
Cobia ( <i>Rachycentron canadum</i> )	X	X	X	X	
Dusky shark ( <i>Carcharhinus obscurus</i> )		X	X		
Sandbar shark ( <i>Carcharhinus plumbeus</i> )		X	X	X	
Sand tiger shark ( <i>Carcharias Taurus</i> )		X	X		

Source: NMFS (2004b and 2005)

S = Includes the seawater salinity zone (salinity  $\geq$  25.0 ‰)

M = Includes mixing water / brackish salinity zone (0.5‰ < salinity < 25.0‰)

F = Includes tidal freshwater salinity zone (0.0‰  $\leq$  salinity  $\geq$  0.5‰)

The National Oceanic and Atmospheric Administration's (NOAA) navigation chart (No. 12334) for the area surrounding RH/NBMT indicates depths drop rapidly to 35<sup>+</sup> feet at the pierhead line and along the shoreline at Pier 12, essentially eliminating habitat for rooted aquatic vegetation in the area.

NYSDEC has classified the water adjacent to the RH/NBMT as Class I water (6 NYCRR parts 700-706 and 800-94). Class I water is saline surface water suitable for fish propagation and survival, as well as secondary recreation.

The water quality data from the Harbor Survey (NYCDEP 2001-2003) sampling stations in the vicinity of RH/NBMT indicate that water quality standards for DO and pH were generally met, with the exception of an event in 2001 where the dissolved oxygen (DO) level reached a low of 3.8 mg/L. This level does not meet the minimum acceptable level of 4.0 mg/L, set by NYSDEC.

The majority of the RH/NBMT is mapped as Zone A6 (within the 100-year flood) with Baseline Flood Elevations (BFEs) from 10 to 11 feet (Flood Insurance Rate Maps [FIRMs] 360497 0054 B, 0055B, and 0062B). A small area inland of Piers 7 and 8 falls within Zone B (100-year to 500-year flood) with no BFE assigned. A smaller area adjacent to Columbia Street is mapped as Zone C which is defined as “[a]reas of minimal flooding.” The interpier areas fall within the Zone A6 designation, and the open water just outside of the U.S. Pierhead line has been assigned to Zone V7 (coastal flooding areas with wave action) with a BFE of 13 feet.

American Society for Testing Materials (ASTM) and Non-ASTM standard environmental record sources were searched by Environmental Data Resources (EDR)<sup>®</sup> for each port facility and surrounding areas to define the areas where hazardous and regulated materials may be present. A summary of search results for the RH/NBMT and the other New York ports (South Brooklyn and Howland Hook) is provided in Table 3-6.

**TABLE 3-6: SUMMARY OF ENVIRONMENTAL DATABASE SEARCH RESULTS - NEW YORK PORTS**

Databases Searched for New York Ports	Red Hook	South Brooklyn	Howland Hook	Databases Searched for New York Ports	Red Hook	South Brooklyn	Howland Hook
ASTM Databases				Non-ASTM Databases (continued)			
CERCLIS-No Further Remedial Action Planned (NFRAP)	--	No/4	Yes/7	Facility Index System/Facility Identification Initiative Program Summary Report (FINDS)	Yes/26	Yes/55	Yes/29
Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)	--	--	No/2	Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA)/TSCA Tracking System - (FTTS)	--	--	No/1
Emergency Response Notification System (ERNS)	--	Yes/Or/4	Yes/26	Formerly Used Defense Sites (FUDS)	No/1	--	--
National Priority List (NPL) and Proposed NPL	--	--	No/1	Hazardous Materials Information Reporting System (HMIRS)	--	--	--
RCRA Large (LQG) and Small (SQG) Quantity Generators	Yes/2/24	Yes/5/51	Yes/4/30	Material Licensing Tracking System (MLTS)	--	--	--
RCRA Transport/Treat, Store, or Dispose (TSD) of Hazardous Wastes	--	No/1	No/3	Mines Master Index File (MINES)	--	--	--
Resource Conservation and Recovery Act (RCRA) Corrective Action Report (CORRACTS)	No/1	Yes/Or/1	No/4	National Priority List Deletions (Delisted NPL)	--	--	--
State Hazardous Waste Sites	--	No/2	No/25	NY Spills Database (NY Spills)	Yes/62	Yes/65	Yes/39
State Leaking Underground Storage Tank (LTanks)	Yes/56	Yes/46	Yes/14	PCB Activity Database System (PADS)	--	--	No/2
State Major Oil Storage Facilities (MOSF/USTs)	--	No/1	Yes/2	RCRA Administrative Action Tracking System (RAATS)	--	--	No/3
State Registered Recycling Facility List (SWRCY)	No/1	--	--	Records of Decision (ROD)	--	--	No/1
State Registered USTs Petroleum Bulk Storage (PBS) Chemical Bulk Storage (CBS)	Yes/34	Yes/23 No/1	Yes/6 Yes/1	Section 7 Tracking Systems (SSTS)	--	--	--
State Solid Waste Landfills	Yes/7	No/2	--	State Chemical Bulk Storage Aboveground Storage Tanks (CBS-ASTs)	No/2	Yes/4	Yes/2
State Tire Storage and Facility List (SWTIRE)	--	--	--	State Hazardous Substance Waste Disposal Site (HSWDS) Inventory	--	--	--
Voluntary Cleanup Program (NY VCP)	No/1	--	Yes/1	State Major Oil Storage Facilities (MOSF-ASTs)	--	No/1	Yes/2
Non-ASTM Databases				State Petroleum Bulk Storage Aboveground Storage Tanks (PBS-ASTs)	Yes/11	Yes/7	No/4
Brownfields Voluntary Cleanup Program	No/1	--	--	Superfund (CERCLA) Consent Decrees (CONSENT)	--	--	--
Coal Gas Sites	No/2	No/3	--	Superfund Liens (NPL Liens)	--	--	--
Delisted Registry Sites (DEL SHWs)	--	--	--	Toxic Chemical Release Inventory System (TRIS)	--	No/1	--
Department of Defense Sites (DOD)	--	--	--	Toxic Substances Control Act (TSCA)	--	--	--
Dry Cleaners	No/1	Yes/1	--	US Brownfields	--	--	No/5

All search radii performed to ASTM E-1527-00 standards for Phase 1 Environmental Assessments.

Yes – listings identified on site. No – no listings identified on site. /# - total listings identified in search area. -- no database listings in search area. Or – orphan site, unmapped.

Several facilities located at RH/NBMT, including cranes, a crane repair shop, machine and paint shops, and vehicle maintenance shops, use regulated and/or hazardous materials. The potential or actual presence of hazardous materials was evaluated through review of site histories and from an environmental database search. Sites identified within a 1-mile radius of RH/NBMT that involve significant storage, use, disposal or release of hazardous materials with the potential to have resulted in impacts on the port facility or involving the port facility directly, are listed in Tables 3-7 and 3-8.

Spills of hazardous materials into the soil and groundwater have been documented on and near the RH/NBMT. Seven spill cases for the site are still active, as are 12 on neighboring properties. Given the expected flow of groundwater from uplands through Red Hook and toward the harbor, on-site groundwater contamination resulting from sources outside the site is possible.

Nine small-quantity generators located adjacent to RH/NBMT involve the use, handling, and storage of hazardous materials, as well as the generation of hazardous waste. One generator had a Resource Conservation and Recovery Act (RCRA) violation, which has since been resolved.

Eleven facilities adjacent to the site contain active and/or closed underground and aboveground storage tanks for bulk petroleum and chemicals.

A solid waste recycling facility is located at the RH/NBMT, and two are located on neighboring properties.

Friable asbestos-containing materials (ACM) at RH/NBMT reportedly have been removed or encapsulated from the facilities located at RH/NBMT. Information related to non-friable ACM and lead-based paint (LBP) is currently not available. However, due to the age of the buildings (1960s), these materials are likely to be present.

TABLE 3-7: RH/NBMT – ON-SITE HAZARDOUS AND REGULATED MATERIALS DATABASE LISTINGS

RCRA Facilities	EPA ID #/ Generator Size	# Violations/ Status	Spills/Leaking Tanks Sites	Product/ Amount	Cause/ Impact	Status	Spills/Leaking Tanks Sites	Product/ Amount	Cause/ Impact	Status	Spills Impacting Water	Cause/Date
Canal Sanitation 39 Ferris Street	NYD986885986. Small quantity	None	East River/Green Street	Fuel oil/ not reported	Equipment failure. Into river	Closed	32 Ferris St./Jakes Products	Fuel oil/ not reported	Equipment failure/ land impact	Closed	Mercury/ 10 lbs fell from a fork-lift.	Fell off fork lift/ 3/5/1993
Watchtower 360 Furman Street	NYD001256353 Small quantity	2 violations /resolved	100 Columbia Street	Petroleum/ not reported	Unknown/ contaminated soil	Active	Imlay/Verona Streets	Petroleum/ not reported	Cause unknown/ land impact	Closed	Fuel oil/ 1 barrel	During ship unloading/ 12/2/1989
Best Tank Cleaning Services, Inc. 197 King Street	NYD982728222 Small quantity	None	90 Columbia Street	Fuel oil/ not reported	Tank test failure/ land impact	Closed	Conover/Pioneer Streets	Fuel oil/ not reported	Abandoned tank/ on street	Active	Unknown oil/ 1 barrel	Spill on ship deck 10/6/1999
Brooklyn PA Marine Terminal 90 Columbia Street	NYD980534259 Large quantity	None	Brooklyn Port Authority, 90 Columbia Street	Diesel/ not reported	Poor housekeeping/ contaminated soil at tank removal	Active	55 Ferris Street	Fuel oil/ not reported	Tank overflow./ land impact	Closed	Hydrofluoric acid/ 500 lbs	Drum on ship/5/1/1993
<b>Petroleum/Chemical Storage Facilities</b>	<b>Tanks/Products Stored</b>	<b>Status</b>	Brooklyn Port Authority	Gasoline/ not reported	Tank test failure/ land impact	Active	Edward Butler Company, 55 Ferris St.	Petroleum/ not reported	Cause unknown/ land impact	Closed	Unknown oil/10 gallons	Cause unknown/ sheen on water/10/6/1999
Building No. 6 55 Ferris Street	(1) 5,500-g UST/fuel oil	Closed- removed	90 Columbia Street/Port Authority	Gasoline/ not reported	Tank failure/ land impact	Closed	Port Authority Marine Terminal, 32 Ferris Street	Fuel oil/ not reported	Tank failure/ land	Closed	Paint/ 1 gallon	During ship loading/8/25/1993
Watchtower Bible and Tract Soc. 336-374 Furman St.	(4) 20,000-g ASTs/fuel oil	Not reported	David Hamburger MFG	Waste oil/ not reported	Deliberate dumping/ ditch impacted	Closed	185 King Street	Diesel/ not reported	Equipment Failure/ land impact	Closed	Unspecified material/ not reported	Problem with ship/ 12/21/2002
Red Hook Container Terminal Foot of Hamilton Avenue	(2) 4,000-g USTs/leaded gasoline (2) 4,000-g USTs/diesel (4) lube oil ASTs (3) other ASTs	In-service	Degraw/Columbia Streets	Unknown/ not reported	Substance released on land.	Active	158 Sullivan Street	Petroleum/ not reported	Abandoned tank truck/ land impact	Active	<b>Solid Waste Management Facilities</b>	<b>Type/Status</b>
New York Marine Terminals 90 Columbia St. (7) 500-600-g USTs/ gasoline; (2) 550-g USTs/ fuel oil; (1) 3,000-g UST/ gasoline	(3) 1,000-5,000-g USTs/ fuel oil (1) 1,000-g UST/ diesel (9) 250-500-g USTs/ other (2) 275-g ASTs/ fuel oil	Closed or removed	Imlay Street at Commerce	Petroleum/ not reported	Deliberate – abandoned tank trailer/ land impact	Closed	185 King Street	Fuel oil/ not reported	Cause unknown/ land impact	Active	Accurate Asbestos, 39 Ferris St	Regulated transfer station/ inactive

Source: Environmental Data Resources (EDR), 2004

**TABLE 3-8: RH/NBMT – OFF-SITE HAZARDOUS AND REGULATED MATERIALS DATABASE LISTINGS**

<b>Spills/Leaking Tanks Sites*</b>	<b>Product/Amount</b>	<b>Cause/Impact</b>	<b>Status</b>
Amity Hospital 336 Hicks Street	Fuel oil/ not reported	Cause unknown/ land impact	Active
Manhole 55769	Petroleum/ not reported	Cause unknown/ land impact	Active
East River- 29 <sup>th</sup> Street	Dielectric fluid/ not reported	Equipment failure/ surface water impact	Active
Elite Carpet and Upholstery 147 Columbia Street	Unknown material/ not reported	Deliberate dumping/ land impact	Active
93 Van Brunt Street	Diesel fuel/ not reported	Cause unknown/ land impact	Active
60 Hamilton Avenue/Melbrook	Fuel oil/ not reported	Tank test failure/ groundwater	Active
Manhole # 1554 170 Van Brunt St.	Unknown petroleum/ not reported	Cause unknown/ groundwater	Active
Vault TN 1554	Unknown petroleum/ not reported	Cause unknown/ land impact	Active
Manhole # 58457 170 Van Brunt St.	Unknown petroleum/ not reported	Cause unknown/ land impact	Active
TM# 1747 Imlay/Summit Street	Unknown petroleum/ not reported	Cause unknown/ land impact	Active
Pole 67345	Transformer oil/ not reported	Transformer fire/ land impact	Active
219 Sullivan Street	Lubricating oil	Cause unknown/ land impact	Active

Source: Environmental Data Resources (EDR), 2004

## **B. SOUTH BROOKLYN MARINE TERMINAL, SUNSET PARK, BROOKLYN**

South Brooklyn Marine Terminal (SBMT) located on Gowanus Bay, on the southwestern Brooklyn waterfront, extends from 30th to 39th Streets in Sunset Park, Brooklyn (Figure 3-7). SBMT is currently used to receive, store, and ship automobiles, all by truck transport. A New York City Police Department automobile impound facility is located on-site. A warehouse for wine shipped by truck and a building that houses graffiti removal equipment employed by the City of New York are also located at SBMT.

The Sunset Park neighborhood is divided by the elevated Brooklyn Queens Expressway/Gowanus Expressway/I-278 (BQE) above Third Avenue. Residential and industrial uses are predominantly located to the east and the west of I-278, respectively (Figure 3-8). East of Third Avenue, residential streets extend upward toward the high point of the community at about Sixth Avenue. The housing in this area is a mix of low-rise brownstones, brick and wood-framed attached houses, and walk-up apartment buildings.

The character of the area changes considerably west of Third Avenue and the BQE. The area between Third Avenue and the waterfront is the New York State-designated Southwest Brooklyn Empire Zone, managed by the Southwest Brooklyn Industrial Development Corporation. Between Third and Second Avenues, west of the elevated Gowanus Expressway, is a mixture of residential and industrial uses. Third Avenue is lined with local retail businesses and walk-up tenement apartments. Second Avenue is primarily industrial, but some residential uses and vacant lots abut industrial uses on the side streets. Extending west to First Avenue, the area is mainly industrial, with low-rise warehouses (Figure 3-9).

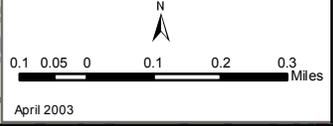
Zoning along the waterfront in this area is for heavy industrial uses (M3-1), which typically generate noise, traffic, and pollutants that must conform to the least restrictive performance standards set by the City for manufacturing districts. Uses such as commercial recreational facilities and amusements are allowed in these districts. M1-2D and M1-2 districts are light manufacturing zones that bound the M3-1 district, between Second and Third Avenues, serving as buffers for the residential districts (e.g., R6) that lie to the east and south.

Sunset Park is a working class neighborhood with an ethnically and economically diverse population of approximately 25,000 people living within ½-mile of the port site (Table 3-9). According to the 2000 U.S. Census, 71 percent of the area's residents classified themselves as Hispanic or Latino, which is significantly higher than New York City's overall rate of 27 percent. Fifteen percent of the population was non-Hispanic White, and African-Americans and Asians comprised five percent each.

Incomes earned throughout the area range predominantly from \$30,000 to \$46,000, with residents within one census tract (18) earning \$85,000 (Table 3-10). Approximately 25 percent of both households and residents lived below the poverty level. Unemployed persons totaled 870, or under 5 percent, of the total population 16 years of age and older.

No significant visual resources exist at SBMT or in the immediate vicinity of the industrial waterfront. While expansive harbor views exist from Sunset Park, the port site is not part of an important view corridor from upland locations as it does not have distinct visual characteristics, such as unique landforms, vegetation or development.

The Sunset Park community has several community, open space and cultural resources that are concentrated primarily between Third and Fourth Avenues. These resources are shown on Figure 3-10 and listed in Table 3-11.

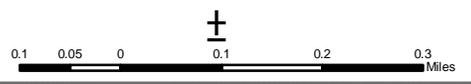


**Legend**  
 Terminal Boundary

**Figure 3-7**  
**Location Map:**  
**South Brooklyn Marine Terminal**

Upper  
New York  
Bay

South Brooklyn Marine Terminal

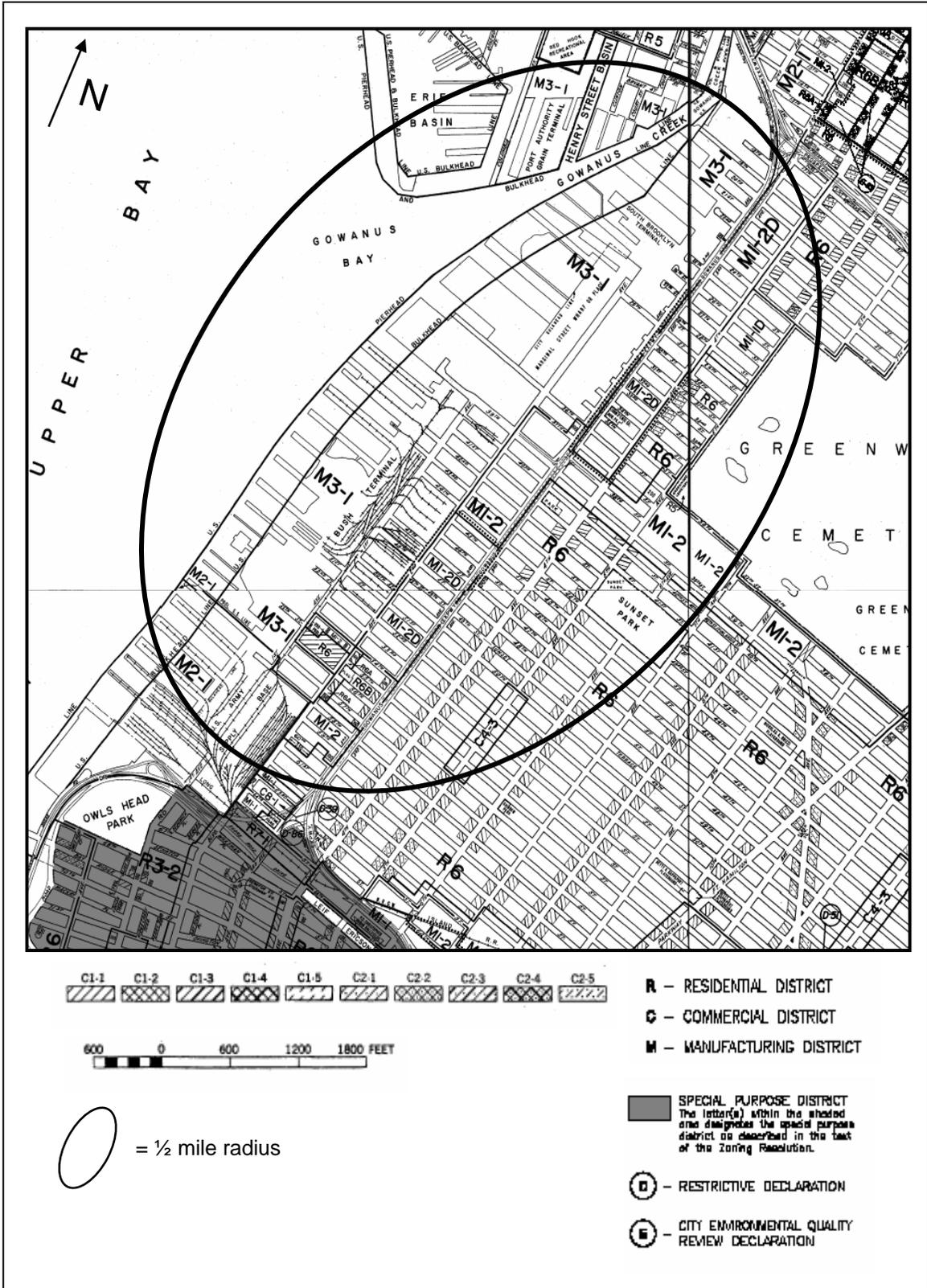


**Legend**

- |                           |                               |                        |
|---------------------------|-------------------------------|------------------------|
| 1-2 Family Residential    | Commercial                    | Parks/Open Space       |
| Multi-Family Residential  | Public Facility/Institutional | Transportation/Utility |
| Warehousing/Manufacturing | Office                        | Vacant                 |

- Terminal Boundary
- 1/2 Mile Buffer

**Figure 3-8:**  
**South Brooklyn Marine Terminal**  
**Land Use**



Source:

**Figure 3-9: Zoning Map – South Brooklyn Marine Terminal**

**TABLE 3-9: SBMT – RACIAL CHARACTERISTICS**

Census Tract*	Total Population	Selected Race and Ethnicity (Non-Hispanic)										Hispanic/Latino**	
		White		Black or African-American Alone		American-Indian, Alaskan Native Alone		Asian Alone		Native Hawaiian/ Other Pacific Islander Alone			
		Population	Percentage	Population	Percentage	Population	Percentage	Population	Percentage	Population	Percentage	Population	Percentage
2	1,303	71	5.4%	49	3.8%	2	0.2%	14	1.1%	0	0.0%	1,132	86.9%
18	1,442	292	20.2%	327	22.7%	10	0.7%	58	4.0%	0	0.0%	709	49.2%
20	1,574	66	4.2%	113	7.2%	2	0.1%	64	4.1%	0	0.0%	1,301	82.7%
55	207	101	48.8%	9	4.3%	2	1.0%	2	1.0%	0	0.0%	80	38.6%
80	4,360	321	7.4%	130	3.0%	24	0.6%	296	6.8%	0	0.0%	3,463	79.4%
82	4,072	406	10.0%	164	4.0%	5	0.1%	253	6.2%	3	0.1%	3,128	76.8%
84	3,229	368	11.4%	47	1.5%	10	0.3%	200	6.2%	0	0.0%	2,553	79.1%
101	4,095	948	23.2%	130	3.2%	25	0.6%	203	5.0%	0	0.0%	2,639	64.4%
145	4326	1,183	27.3%	213	4.9%	8	0.2%	125	2.9%	0	0.0%	2,574	59.5%
<b>Study Area Total</b>	<b>24,608</b>	<b>3,756</b>	<b>15.3%</b>	<b>1,182</b>	<b>4.8%</b>	<b>88</b>	<b>0.4%</b>	<b>1,215</b>	<b>4.9%</b>	<b>3</b>	<b>0.0%</b>	<b>17,579</b>	<b>71.4%</b>

Source: United States Bureau of the Census. 2000 Census Summary File 1 and Summary File 3.

\* Located entirely or partially within ½-mile of site

\*\* Hispanic/Latino was counted as a separate racial category by the 2000 U.S. Census

**TABLE 3-10: SBMT – SELECTED INCOME AND POVERTY CHARACTERISTICS**

Census Tract*	Households				Individuals			
	Total Number of Households	1999 Median Household Income	Households Below the Poverty Level	% of Households Below the Poverty Level	Individuals Below the Poverty Level	% of Individuals Below the Poverty Level	Unemployed Persons 16 Years and Older	% Unemployed Persons 16 Years and Older
2	358	\$29,219	110	30.7%	407	31.3%	105	11.2%
18	7	\$85,000	2	28.6%	2	12.5%	2	0.1%
20	448	\$26,813	119	26.6%	516	33.1%	86	7.7%
55	88	\$46,500	6	6.8%	6	3.8%	0	0.0%
80	1,357	\$26,902	403	29.7%	1097	25.2%	99	3.0%
82	1,261	\$28,648	343	27.2%	1142	28.3%	131	4.4%
84	1,044	\$30,504	247	23.7%	920	28.5%	114	4.6%
101	1,367	\$30,788	273	20.0%	923	22.7%	166	5.3%
145	1,510	\$30,735	376	24.9%	1152	26.7%	167	5.0%
<b>Study Area Total</b>	<b>7,440</b>	<b>N/A</b>	<b>1,879</b>	<b>25.3%</b>	<b>6,165</b>	<b>26.8%</b>	<b>870</b>	<b>4.6%</b>

Source: United States Bureau of the Census. 2000 Census Summary File 1 and Summary File 3.

\* Located entirely or partially within ½-mile of site

N/A - Not Available

**TABLE 3-11: SBMT – COMMUNITY, RECREATIONAL/OPEN SPACE AND HISTORIC RESOURCES**

Map Key**	Name*	Address
<b>Community Facilities</b>		
1	Brooklyn Public Library -- Sunset Park Branch	5108 Fourth Ave
2	MS 136: C.O. Dewey Middle School	4004 Fourth Ave
3	PS 1: Bergen School	309 47th St
4	PS 172: Gowanus School	825 Fourth Ave
5	PS 371: Lillian L. Rashkis School	355 37th St
6	St. Andrew's Community Day Care Center	4917 Fourth Ave
7	St. Michael's Elementary School	4222 Fourth Ave
8	Young Dancers in Repertory - A non-profit Brooklyn-based arts organization which provides professional training and fosters growth and communication through dance via creative educational arts programming and performances for children, youth, and the general public.	231 60th St
9	Center for Family Life in Sunset Park - Comprehensive social service agency offering a range of programs for youth and families in the Sunset Park neighborhood.	345 43rd St
10	Center for Family Life Employment Services - Provides job readiness training, job referrals, and job placement to unemployed Brooklyn residents.	443 39th St
11	Neighbors Helping Neighbors, Inc. - NHN objectives are to help low-income tenants retain and improve their homes; help low- and moderate-income people succeed in purchasing affordable first homes; help homeowners repair and improve their homes without destabilizing their finances.	443 39th St
12	New York Fire Department Engine Company 228	436 39th St
13	New York Police Department -- 72nd Precinct	830 Fourth Ave
14	Opportunities for a Better Tomorrow Job training and placement agency located in Sunset Park.	783 Fourth Ave
15	Southwest Brooklyn Industrial Development Corp -	269 37th St
16	Sunset Park Senior Center	4520 Fourth Ave
17	Sunset Park Redevelopment Committee, Inc. - Works with homeowners of 1-4 homes and multiple-family dwellings in Southwest Brooklyn, to renovate their properties so that they operate energy efficiently.	5101 Fourth Ave
18	Lutheran Medical Center – Full range of ambulatory, emergency and in-patient care in a 501-bed facility along other clinics and community services.	150 55th St
<b>Open Space/Parklands</b>		
19	PS 1 Playground - 1.5 acres, including basketball courts and playground equipment.	Third Ave at 46th and 47th St
20	Sunset Park - 24.5 acres, including soccer fields and open space.	Firth to Seventh Ave, 41st to 44th St
<b>Historic Resources</b>		
21	Bush Terminal	43rd, between Marginal and First
22	Sunset Park Historic District	Fourth Ave to 7th Ave, 38th to 64th St

Source: ESEC 2004.

\* Located within ½-mile of site

\*\* See Figure 3-10.



South Brooklyn Marine Terminal



- Legend**
- Terminal Boundary
  - 1/2 Mile Buffer

**Figure 3-10: South Brooklyn Marine Terminal: Community, Recreational/Open Space, and Historic Resources**

The Sunset Park neighborhood includes two designated historic resources: the Bush Terminal Buildings and the Sunset Park Historic District. The Bush Terminal buildings are located along 43<sup>rd</sup> Street between Marginal Street and First Avenue. According to the New York State Historic Preservation Office (NYSHPO), Bush Terminal is eligible for listing on the State and National Registers of Historic Places. The buildings are also eligible for New York City landmark designation. The Sunset Park Historic District, characterized by its uniform 19<sup>th</sup> century residential development, is roughly bounded by Fourth Avenue, 38<sup>th</sup> Street, Seventh Avenue, and 64<sup>th</sup> Street. The historic district is listed on the National Register of Historic Places.

In addition to the BQE, major roadways that serve both the Sunset Park neighborhood and SBMT include 39<sup>th</sup> Street and Second Avenue. Second Avenue is the most heavily used local roadway in the port area, with traffic flows concentrated south of the BQE. Truck traffic is a large component of overall vehicular volume within the area; however, most of the truck traffic is not currently related to operations at the port site.

Subways serving the local community include the M, N, and R lines, which run under Fourth Avenue. All the lines stop at the subway station at 36<sup>th</sup> Street (an express stop), and the N and R lines serve the station at 25<sup>th</sup> Street. Local buses operate on Third Avenue, as well as on 39<sup>th</sup>, 49<sup>th</sup>, and 50<sup>th</sup> Streets.

SBMT is located in the New York-New Jersey Metropolitan Region, which is designated by the USEPA as a non-attainment area for ozone and PM<sub>2.5</sub>, and a maintenance area for CO. The area is designated as being in attainment for all of the other pollutants.

The latest ambient air quality data were collected in 2004 by the NYSDEC at monitoring stations located at Flatbush Avenue between Tillary and Johnson Street, and at 424 Leonard Street in Greenpoint, Brooklyn. The data showed CO, PM<sub>2.5</sub>, and PM<sub>10</sub> levels that comply with the NAAQS.

The principal sources of noise within and immediately surrounding SBMT are motor vehicles and trucks traveling on 39<sup>th</sup> Street and Second Avenue. Land uses adjacent or proximate to these roadways are exposed to relatively constant noise from these vehicles. However, since these land uses are limited to warehousing, manufacturing, and commercial structures, they are not considered noise-sensitive. The nearest noise-sensitive receptors are a pocket of residences located along 43<sup>rd</sup> Street, between 2<sup>nd</sup> and 3<sup>rd</sup> Avenues and I-278. However, warehousing and manufacturing uses buffer these residences from port-related operations and vehicular noise.

The natural habitats of the SBMT and surrounding area have been modified by human activities to support port and urban uses. Consequently, natural habitat is limited. Intertier and offshore open water are sublittoral zones. A limited littoral zone exists immediately adjacent to the riprap/artificial shore. Most of the upland habitat within the port site is paved. The few areas that are not covered with impervious surface are urban vacant lots with scattered patches and strips of successional old field and successional southern hardwoods. Low marsh has been documented in areas where the piers have deteriorated and in the areas where fill had been placed between piers (EKE 1999). These areas may also support some intertidal mudflat habitat.

A variety of common bird species including herring, ring-billed, and great black-backed gulls, rock doves, and starlings were observed during a site visit (September/October 2004). A ring-necked pheasant was noted and two black-crowned night herons (*Nycticorax nycticorax*), a New Jersey Threatened species, were observed roosting in a tree along the northernmost interpier shoreline in the vicinity of the police auto impoundment facility.

State and Federally protected species include the four turtles and shortnose sturgeon identified in Table 3-4. No federally protected upland species have been identified on or adjacent to the site, with the

exception of an occasional transient individual (USFWS 2004a). However, NYSDEC has indicated that the New York State threatened pied-billed grebe (*Podilymbus podiceps*) may occur at or near the SBMT. No significant state or Federal habitat is located on or adjacent to the site. EFH species are identified in Table 3-5. The list of federally managed species and their EFH are updated as additional information about a particular species' life history or population status changes. At such time as any project is proposed, the lead agency should review the status of EFH and the federally and state managed species to obtain the current designations.

Freshwater wetlands depicted on the NYSDEC freshwater wetland map and NWI Map (Jersey City Quadrangle) are not located within or immediately adjacent to the SBMT (Figures 3-11 and 3-12). Certain interpier areas in the vicinity of the site are classified as wetland on the NWI map and are identified by the NYSDEC as littoral habitat (NY tidal wetland maps Nos. 580-498, 582-498 and 582-500). Interpier areas near the port site support submerged and emergent intertidal wetlands.

The NOAA navigation chart (No. 12334) for the area indicates that water depths drop rapidly to 27+ feet at the pierhead line at the north end of the site and to 30+ feet on the south end of the site.

NYSDEC has classified the water adjacent to the SBMT as Class I water (6 NYCRR parts 700-706 and 800-94). Class I water is saline surface water suitable for fish propagation and survival, as well as secondary recreation.

The water quality data from the Harbor Survey (NYCDEP 2001-2003) sampling stations in the vicinity of SBMT indicated that water quality standards for both DO and pH were consistently met.

Similar to RH/NBMT, the greater portion of the SBMT is mapped as Zone A6 with BFEs between 10 and 11 feet (FIRMs 360497 0072B and 0084B). Small areas of Zone B and Zone C are immediately south of Bush Terminal. The interpier area at the end of 56<sup>th</sup> and 57<sup>th</sup> Streets along with the open water at the U.S. Pierhead line is Zone V7 with a BFE of 13 feet.

The potential or actual presence of hazardous materials in the vicinity of SBMT was evaluated through a review of site histories and from an environmental database search. A summary of search results is provided in Table 3-6. Sites involving significant storage, use, disposal or release of hazardous materials involving the port facility or adjacent facilities are summarized in Table 3-12 and Table 3-13, respectively.

Twenty small-quantity and five large-quantity generators are located on neighboring properties. These sites involve the use, handling, and storage of hazardous materials, as well as the generation of hazardous waste. Five sites were cited for RCRA violations, with all but one violation appearing to be resolved.

One Major Oil Storage Facility (MOSF) with an oil storage capacity in excess of 29 million gallons, one chemical bulk storage facility, one dry cleaner, and seven petroleum UST sites are also located near or adjacent to the site. Tank facilities located at SBMT are summarized in Table 3-12.

Spills of hazardous materials into the soil and groundwater have been documented on and near SBMT. Given the expected flow of groundwater from uplands through the site and toward the harbor, on-site groundwater contamination resulting from sources outside of SBMT is possible.

A limited subsurface soil investigation found ash and slag in the subsurface soils as well as measurable gasoline, oil, metals, and polychlorinated biphenyl (PCB) contamination. The gasoline and oil contamination appears high enough to warrant remediation. Although monitoring wells are present at the site, published studies of groundwater quality are not presently available.



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Miles



Legend  
 State Wetland

Figure 3-11:  
State Wetlands Map  
South Brooklyn Marine Terminal

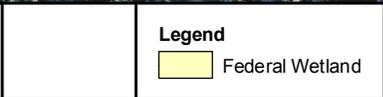
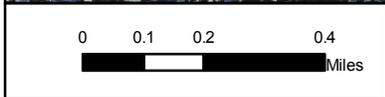
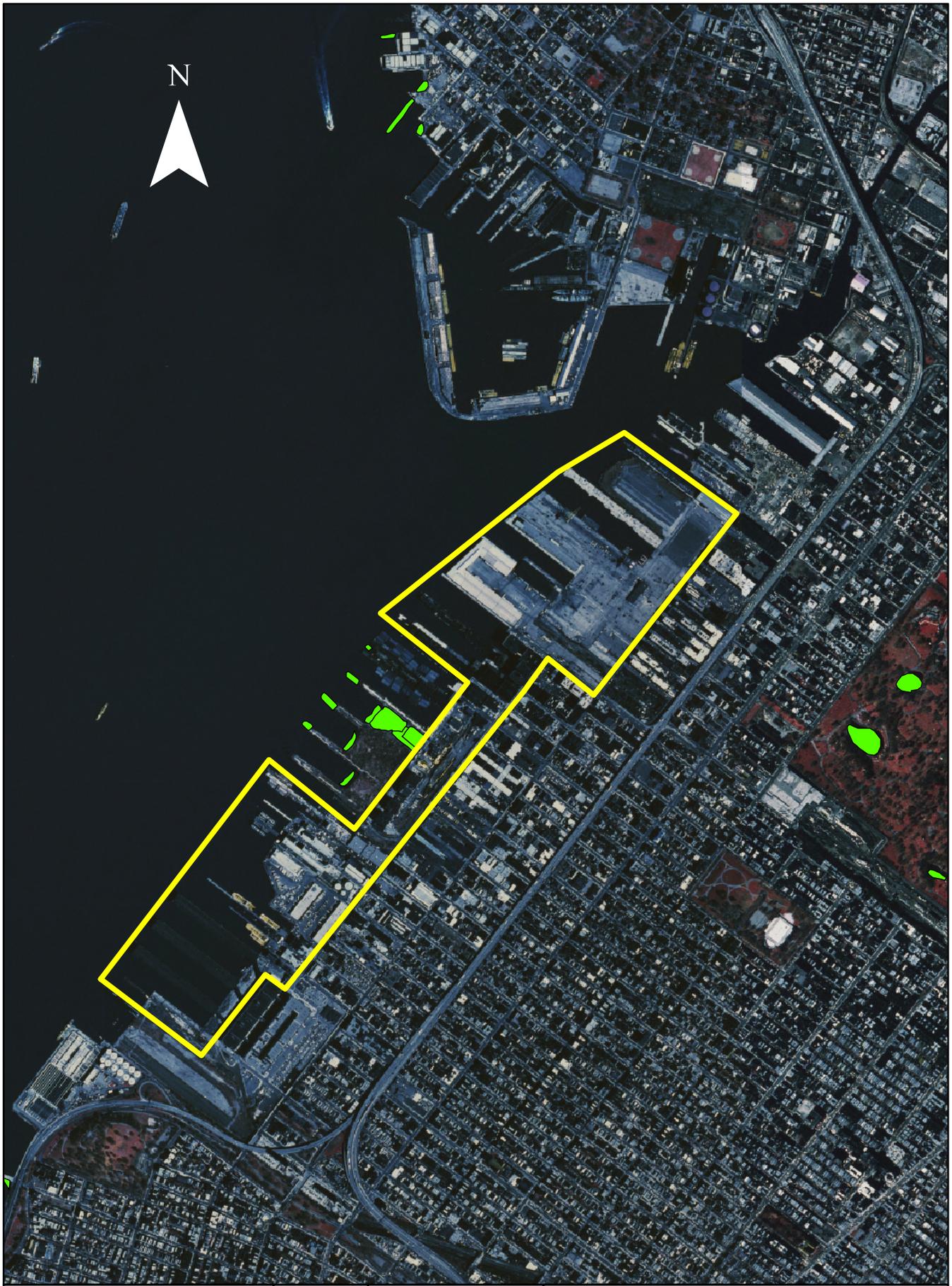


Figure 3-12:  
Federal Wetlands Map  
South Brooklyn Marine Terminal

**TABLE 3-12: SBMT – ON-SITE HAZARDOUS AND REGULATED MATERIALS DATABASE LISTINGS**

RCRA Facilities	EPA ID #/ Generator Size	# Violations/ Status	Petroleum/Chemical Storage Facilities	Tanks/Products Stored	Status	Spills/Leaking Tanks Sites	Product/ Amount	Cause/ Impact	Status
Depts. Port Intl Trade & Commission 39 <sup>th</sup> Street, between 1 <sup>st</sup> Avenue and river	NYD986908929/ Small quantity	1/Annual Report / Manifest/ compliance order.	Ogden Food Services Corp. Building 110	(1) 2,880-g UST/fuel oil (1) 1,800-g UST/ fuel oil	Active	Brooklyn Marine Terminal Foot of 39 <sup>th</sup> Street	Petroleum/ not reported	Unknown/ around USTs and pumps	Active
International Term Operating Co., Inc. 1-39 <sup>th</sup> Street Terminal	NYD981873912/ Small quantity	None	SBMT Foot of 39 <sup>th</sup> Street and 1 <sup>st</sup> Avenue	(5) 4,000-g USTs/diesel (2) 550-g USTs/ gasoline; (1) 550-g UST/ waste oil	Closed or removed	116 39 <sup>th</sup> Street/Magnolia Ind.	Fuel oil/ 5-gallons	Tank overflow/ land impact	Active
NYC Print Shop HRA 36 <sup>th</sup> Street/2 <sup>nd</sup> Avenue	NYR000060624/ Small quantity	None	Piers Services	(3) 550-g USTs/gasoline	Closed	New York City Transit 36 <sup>th</sup> Street/Second Avenue	Hydraulic oil/ 6-gallons	Leaking crane/ land impact	Active
Interdynamics Inc. 80 39 <sup>th</sup> Street	NY0000110486/ Small quantity	1/Manifest oversight/written informal enforcement action.	Interdynamics, Inc.	(4) ASTs (size not reported)/ dichloromethane	Closed	Interdynamics, Inc.	Oil/ not reported	Dumping/ land impact	Closed
Brooklyn Coatings 68 35 <sup>th</sup> Street	NYD986871267/ Small quantity	1/compliance	Industry City Associates 551 Second Avenue	(1) 20,000-g UST/fuel oil (1) 20,000-g UST/ fuel oil	Closed or removed Active	116 39 <sup>th</sup> Street	Fuel oil/ 3-gallons	Tank overflow/ land impact	Closed
Sentinel Bag and Paper 219 East 36 <sup>th</sup> Street	NYD001465483/ Small quantity	None	Ogden Food Services Corp. Building 125	(2) 10,000-g USTs/ fuel oil (2) 5,000-g USTs/fuel oil	Active	13-10 East 37 <sup>th</sup> Street	Fuel oil/ 1-gallon	Equipment failure/land impact	Closed
General Paper Goods Mfg. Inc. 253 36 <sup>th</sup> Street	NYD001368182/ Small quantity	None	<b>Spills Impacting Water</b>	<b>Product/ Amount</b>	<b>Cause/Date</b>	12-15 East 37 <sup>th</sup> Street	Petroleum/ 40-gallons	Unknown/ land impact	Closed
Northeast Marine Terminal Co., Inc. Foot of 39 <sup>th</sup> Street	NYD052798261/ Small quantity	None, but listed in CORRACTs	North 1 <sup>st</sup> Street Terminal	Mechanical foam/ 5- gallons	Released during fire system test/ 10/30/1996	Vault 2020 39 <sup>th</sup> Street/Second	PCB oil/ 2-gallons	Leaked in vault/ vault drain	Active
<b>RCRA CORRACTs</b>	<b>Status</b>	<b>Date</b>	East River, South of Gowanus Gas Turbine Site	Unknown material/ not reported	Repair of pier/ 5/19/1999	2 <sup>nd</sup> Avenue and 39 <sup>th</sup> Street	Diesel/ 25-gallons	Vehicle leak/ land impact	Closed
Northeast Marine Terminal Co., Inc.	High Priority RFA/ no RFI	as of 1993 as of 1995				BS 3181 39 <sup>th</sup> Street/First Avenue	Petroleum/ 2-gallons	Unknown/ water	Active

Source: Environmental Data Resources, 2004.

**TABLE 3-13: SBMT – OFF-SITE HAZARDOUS MATERIALS DATABASE LISTINGS\***

<b>Spills/Leaking Tanks Sites</b>	<b>Product/Amount</b>	<b>Cause/Impact</b>	<b>Status</b>
4014 First Avenue	Construction material/not reported	Dumping/surface water	Active
Show Auto Sales 4001 Second Avenue	Gasoline/ not reported	Release during removal of UST/land impact	Active
<b>RCRA CORRACTs</b>	<b>Status</b>	<b>Date</b>	
Batchford Base Plant 32 33 <sup>rd</sup> Street	PA completed	9/22/1987	

Source: Environmental Data Resources, 2004.

In 2002, ACM and LBP testing was conducted at 1) the C-shaped 39<sup>th</sup> Street cargo shed at Berths 1, 2, and 3; 2) the “N”-building cargo shed at Berth 4; 3) large- and small-scale houses just east of these cargo sheds; 4) the 35<sup>th</sup> Street cargo shed which has since been demolished; and 5) the office building area at 35<sup>th</sup> Street. All structures tested positive for friable and non-friable ACM. LBP, defined as paint containing at least 0.5% lead, was found in all structures that were tested, with the highest concentration at 30.7%.

Subsurface contamination from historic activities at the site is highly possible. However, such impacts have not been comprehensively documented. For example, waterfront areas have traditionally been filled using a variety of materials, such as slag and ash, many of which are now regarded as either sources of contaminants or as actual contaminants.

### C. HOWLAND HOOK MARINE TERMINAL, STATEN ISLAND

Howland Hook Marine Terminal (HHMT) is located on Staten Island's northwestern waterfront along the Arthur Kill, approximately one mile west of Arlington (Figure 3-13). The area between Arlington and the port site is sparsely populated, with large industrial sites and few local roadways. Much of the area is undeveloped and vacant. Howland Hook is currently operated as the New York Container Terminal. The Port Authority leases space for warehousing and distribution at the site. Directly east, a 39-acre intermodal rail terminal is under construction at the former Port Ivory site.

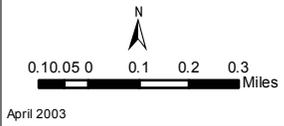
Prominent land uses around HHMT include transportation facilities and industrial sites (Figure 3-14). The Goethals Bridge (south of the site) provides vehicular access between Staten Island and New Jersey. The Staten Island and South Shore Expressways link the area to points south and east. Industrial properties south of the port site include the Port Authority's Gulfport, Visy Paper Plant, R. T. Baker & Sons (defunct salvage operation), and the former GATX Staten Island Terminal property, which was recently purchased by International Speedway Corporation for development of a proposed Motorsports Entertainment complex. The Arlington Rail Yard is located further east of Port Ivory.

Zoning around HHMT is predominantly manufacturing, ranging from M3-1 (heavy manufacturing) north and south of Goethals Bridge (including the port site), and medium (M2-1, including the Goethals Mobile Home Park) to light manufacturing (M1-1) further east. The closest residential zone is R3-2, located nearly one mile east in the Arlington neighborhood (Figure 3-15).

According to the 2000 U.S. Census, approximately 17,000 people live within ½-mile of HHMT, within either New York or New Jersey (Table 3-14). Approximately half of the population is Hispanic/Latino, while non-Hispanic Whites and African-Americans each comprise nearly ¼ of the population. The 1999 median income ranged from approximately \$25,000 to over \$50,000 (Table 3-15). Approximately 26 percent of total households and individual persons lived below the poverty level and unemployed persons totaled 861 or 7 percent of the population 16 years of age and older.

Community and open space resources providing services to the port area are generally located to the east in Arlington (Figure 3-16 and Table 3-16).

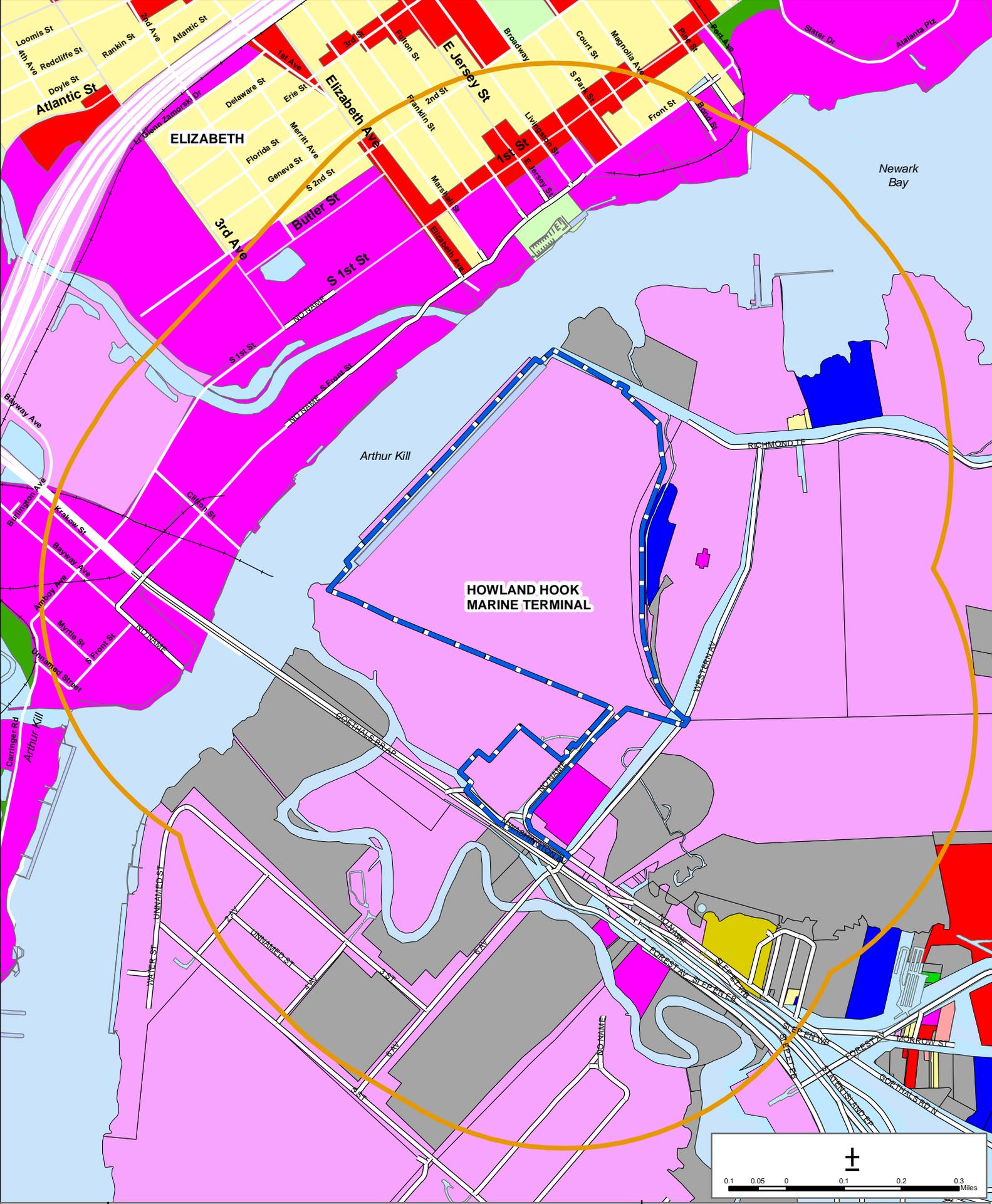
Two historic resources are located near HHMT: Goethals Bridge and the Staten Island Railroad Vertical Lift Bridge. Goethals Bridge has been determined eligible for listing on the National Register of Historic Places by both the New York and New Jersey Historic Preservation Offices (HPO) (Figure 3-16). The 7,109-foot-long bridge is a cantilevered span that rises on concrete arched piers. Numerous prehistoric and archeological sites have also been reported in the vicinity of the port site and the Staten Island portion of the Goethals Bridge, including resources dating from the Paleoindian to the Contact Periods. As the northwestern shore of Staten Island has long served as a transportation route through the area, Colonial Period historical sites are also likely. The Staten Island Railroad Vertical Lift Bridge, which was used until 1991 to provide railroad access over the Arthur Kill, is located directly west of the port site. The structure was erected in 1959 to replace an 1889 swing bridge in the same location. The bridge has been found eligible for listing on the New Jersey Register of Historic Places and the National Register of Historic Places by the NJHPO. Prehistoric resources have been reported to be located in three concentrations at the Old Place site, located immediately southwest of the port site. Some of this area is certainly disturbed; portions of it are either undisturbed or covered by parking lots, roads, or fill with minimal disturbance.



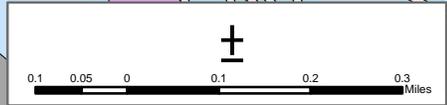
**Legend**

 Terminal Boundary

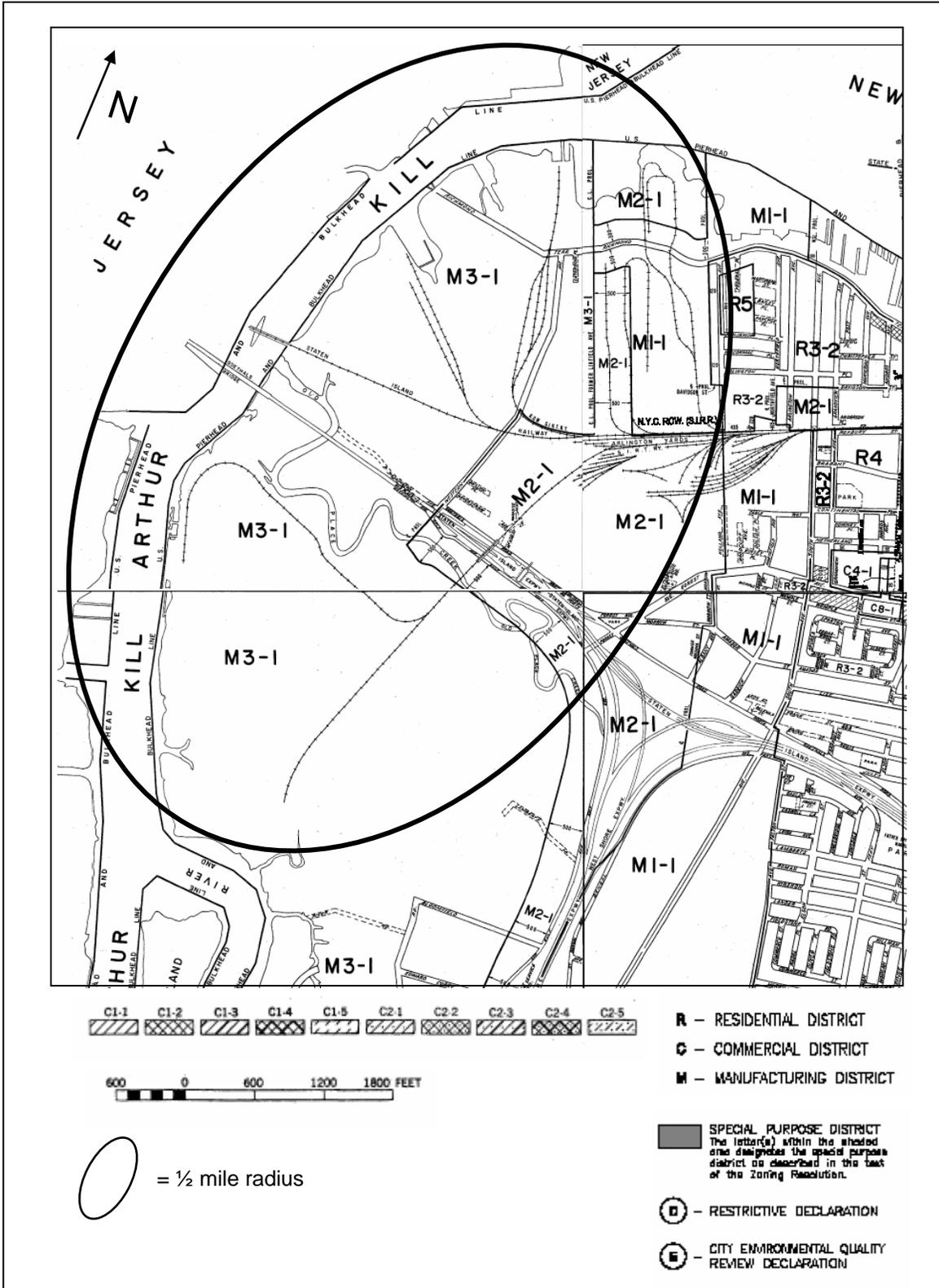
**Figure 3-13**  
**Location Map:**  
**Howland Hook Marine Terminal**



Legend			
<span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	1-2 Family Residential	<span style="background-color: red; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	Commercial
<span style="background-color: orange; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	Multi-Family Residential	<span style="background-color: blue; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	Public Facility/Institutional
<span style="background-color: magenta; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	Warehousing/Manufacturing	<span style="background-color: lightpink; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	Transportation/Utility
<span style="background-color: green; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	Parks/Open Space	<span style="background-color: grey; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	Vacant
<span style="border-bottom: 2px dashed blue; width: 20px; display: inline-block;"></span>	Terminal Boundary	<span style="border-bottom: 2px solid orange; width: 20px; display: inline-block;"></span>	1/2 Mile Buffer



**Figure 3-14:**  
**Howland Hook**  
**Land Use**  
 January 2005



Source:

**Figure 3-15: Zoning Map – Howland Hook Marine Terminal**

**TABLE 3-14: HHMT – RACIAL CHARACTERISTICS**

Census Tract*	Municipality	Total Population	Selected Race and Ethnicity (Non-Hispanic)										Hispanic/Latino**	
			White		Black or African-American Alone		American-Indian, Alaskan Native Alone		Asian Alone		Native Hawaiian/ Other Pacific Islander Alone			
			Population	Percentage	Population	Percentage	Population	Percentage	Population	Percentage	Population	Percentage	Population	Percentage
303	Elizabeth	3,414	914	26.8%	368	10.8%	2	0.1%	22	0.6%	0	0.0%	1,952	57.2%
304	Elizabeth	4,694	503	10.7%	1,624	34.6%	1	0.0%	4	0.1%	0	0.0%	2,521	53.7%
305	Elizabeth	4,559	1,021	22.4%	405	8.9%	10	0.2%	13	0.3%	0	0.0%	3,003	65.9%
306	Elizabeth	3,627	1,229	33.9%	846	23.3%	3	0.1%	54	1.5%	0	0.0%	1,454	40.1%
323	New York City	1,092	335	30.7%	360	33.0%	0	0.0%	54	4.9%	0	0.0%	313	28.7%
<b>Study Area Total</b>		<b>17,386</b>	<b>4,002</b>	<b>23.0%</b>	<b>3,603</b>	<b>20.7%</b>	<b>16</b>	<b>0.1%</b>	<b>147</b>	<b>0.8%</b>	<b>0</b>	<b>0.0%</b>	<b>9,243</b>	<b>53.2%</b>

Source: United States Bureau of the Census. 2000 Census Summary File 1 and Summary File 3.

\* Located entirely or partially within ½-mile of site

\*\* Hispanic/Latino was counted as a separate racial category by the 2000 U.S. Census

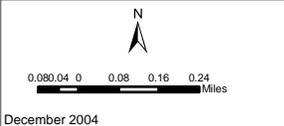
**TABLE 3-15: HHMT – SELECTED INCOME AND POVERTY CHARACTERISTICS**

Census Tract*	Municipality	Households				Individuals			
		Total Number of Households	1999 Median Household Income	Households Below the Poverty Level	% of Households Below the Poverty Level	Individuals Below the Poverty Level	% of Individuals Below the Poverty Level	Unemployed Persons 16 Years and Older	% Unemployed Persons 16 Years and Older
303	Elizabeth	1017	\$33,068	226	22.2%	787	23.3%	126	5.4%
304	Elizabeth	1367	\$26,648	436	31.9%	1465	31.4%	241	7.7%
305	Elizabeth	1,426	\$34,913	374	26.2%	1048	23.0%	277	8.1%
306	Elizabeth	1,279	\$24,525	388	30.3%	1055	29.1%	195	7.5%
323	New York City	391	\$51,071	7	1.8%	36	3.4%	22	2.8%
<b>Study Area Total</b>		<b>5,480</b>	<b>N/A</b>	<b>1,431</b>	<b>26.1%</b>	<b>4,391</b>	<b>25.4%</b>	<b>861</b>	<b>7.0%</b>

Source: United States Bureau of the Census. 2000 Census Summary File 1 and Summary File 3.

\* Located entirely or partially within ½-mile of site

N/A - Not Available



Legend	
	Terminal Boundary
	1/2 Mile Buffer

**Figure 3-16: Howland Hook Marine Terminal: Community, Recreational/Open Space, and Historic Resources**

**TABLE 3-16: HHMT - COMMUNITY, RECREATIONAL/OPEN SPACE AND HISTORIC RESOURCES**

Map Key**	Name*	Address
<b>Community Facilities</b>		
1	PS 44: Thomas C. Brown School	80 Maple Parkway
2	Engine Company 158	65 Harbor Rd
<b>Open Space/Parklands</b>		
3	Marine's Marsh Park	Holland Ave to Catherine Pl., Richmond Terrace to railroad tracks
<b>Historic Resources</b>		
4	Goethals Bridge	
5	Staten Island Railroad Vertical Lift Bridge	

Source: ESEC, 2004

\* Located within ½ -mile of site

\*\* See Figure 3-16.

The two designated historic resources are also the area's two most dominant visual resources. The presence of these structures is emphasized by the low-lying elevation of the area's waterfront. Gantry cranes located on the HHMT site add a visual reminder of the area's dedication to industrial and manufacturing uses.

In addition to the Goethals Bridge, additional vehicular infrastructure in the area around the port site includes the Staten Island Expressway (also known as I-278), Goethals Road, and Gulf Avenue. While port-related truck traffic on the bridge and the Expressway constitute a small portion of total vehicular traffic, port-related truck traffic makes up approximately 80 percent of the truck traffic on the local roads around HHMT.

Railroad tracks are also present on the port site, and connect to the Arlington Rail Yards to the east. However, since the 1991 closing of the Staten Island Railroad Vertical Lift Bridge, freight rail in this area has been discontinued. Recent plans to restart the yards and the bridge could significantly alter transportation patterns for freight accessing the port site.

HHMT is located in the New York-New Jersey Metropolitan Region, which is designated by the USEPA as a non-attainment area for ozone and PM<sub>2.5</sub>, and a maintenance area for CO. The area is designated as being attainment for all of the other pollutants.

The latest ambient air quality data were collected in 2004 by the NYSDEC at monitoring stations located at Susan Wagner High School (which is located at Brielle Avenue and Manor Road) in Willowbrook, 364 Port Richmond Avenue in Port Richmond, 2470 Richmond Avenue in Willowbrook, and at 1001 Richmond Hill Road in New Springfield. The data showed CO, PM<sub>2.5</sub>, and PM<sub>10</sub> levels that comply with the NAAQS.

Port-related activities are a major source of noise within and immediately surrounding HHMT, as are motor vehicles and trucks traveling on the Staten Island Expressway (I-287), Goethals Road, and Gulf Avenue. Warehousing and manufacturing uses adjacent or proximate to these roadways are exposed to relatively constant noise from these vehicles. The nearest noise-sensitive receptor is a mobile home park, approximately 1,500 feet east of the site, adjacent to Goethals Road.

HHMT has several ecological communities. With the exception of urban vacant lot, most of these communities are located on the north end of the Port Ivory site. Bridge Creek runs between the HHMT and Port Ivory. Both shorelines are vegetated with dense stands of *Phragmites australis*. Intertidal mudflats and low salt marsh lie at the confluence of the creek and the Arthur Kill. The transition zone

between the intertidal marsh and uplands along most of the shoreline of Port Ivory comprise a thin strip of salt shrub community. The uplands include urban vacant lot and successional old field, with patches of successional southern hardwoods. The shoreline is estuarine riprap/artificial shore that transitions from intertidal mudflat to littoral and sublittoral zones. High salt marsh communities are located adjacent to site on both the east side of Port Ivory and the south side of HHMT. During a site visit (September/October 2004), a small (less than 0.5 acre), unmapped, shallow emergent marsh was identified in the northwest corner of the site.

Many avian species, including great and snowy egrets, yellow rumped and palm warblers, song and white-throated sparrows, and redwinged blackbirds were observed during a site visit. Yellow-crowned night heron (*Nyctanassa violaceus*), osprey (*Pandion haliaetus*), and savannah sparrow (*Passerculus sandwichensis*), all protected species in either New York or New Jersey, were identified on or near HHMT.

State and Federally protected species include the four turtles and shortnose sturgeon identified in Table 3-4. The yellow-crowned night heron (*Nyctanassa violaceus*), a New Jersey endangered species, was observed in the marshes associated with Howland Hook, Old Place Creek, and Bridge Creek. The osprey (*Pandion haliaetus*), a New Jersey threatened species and a special concern species in New York, has been confirmed nesting in the Arthur Kill and Kill Van Kull area (Kerlinger 2004), as well as on Shooter's Island, northeast of the Howland Hook site. The savannah sparrow (*Passerculus sandwichensis*), a New Jersey threatened species, was seen with other migrating sparrow species in an area of successional old field (weedy fields).

The New York State endangered peregrine falcon (*Falco peregrinus*) has been documented near the site (NYSDEC 2004). No federally protected upland species have been identified at the site (USFWS 2004a).

EFH species are identified in Table 3-5. The list of federally managed species and their EFH are updated as additional information about a particular species' life history or population status changes. At such time as any project is proposed, the lead agency should review the status of EFH and the federally and state managed species to obtain the current designations.

NYSDEC has designated the area adjacent to Howland Hook as a Significant Coastal Fish and Wildlife Habitat (NYSDEC, 2004). USFWS has designated the northwest portion of Staten Island as a Significant Habitat Complex known as the Arthur Kill Complex (USFWS, 2004). The area includes three island heronries (Prall's Island, Shooter's Island, and Isle of Meadows) located in the Arthur Kill/Kill Van Kull waterway. The Arthur Kill Complex includes associated tributaries and wetlands along the waterway. Foraging areas found surrounding these heronries are included in the Arthur Kill Complex. Goethals Bridge Pond, a 50-acre shallow brackish pond surrounded by common reed, is located adjacent to Howland Hook in the Arthur Kill Complex.

Freshwater wetlands depicted on either the NYSDEC Freshwater Wetland Map (Jersey City Quadrangle) or on the NWI Map (Jersey City Quadrangle) are not located within the site (Figures 3-17 and 3-18). However, a small patch of shallow emergent wetland was observed in the northwest corner of Port Ivory. Both state and federal maps show freshwater wetlands in areas adjacent to HHMT. Intertidal (estuarine emergent) wetlands are located immediately east of Port Ivory and immediately south of HHMT. These wetlands are associated with nearly the entire length of Bridge Creek that runs between Howland Hook and Port Ivory. The area immediately offshore has been identified by NYSDEC as littoral zone, with patches of coastal shoals, mudflats and intertidal marsh (map No. 568-498). The predominant vegetation in this zone is saltwater cordgrass (*Spartina alterniflora*).



0 0.05 0.1 0.2  
Miles

**Legend**  
State Wetland

Figure 3-17:  
State Wetlands Map  
Howland Hook Marine Terminal

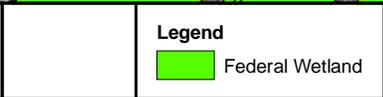
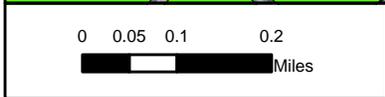
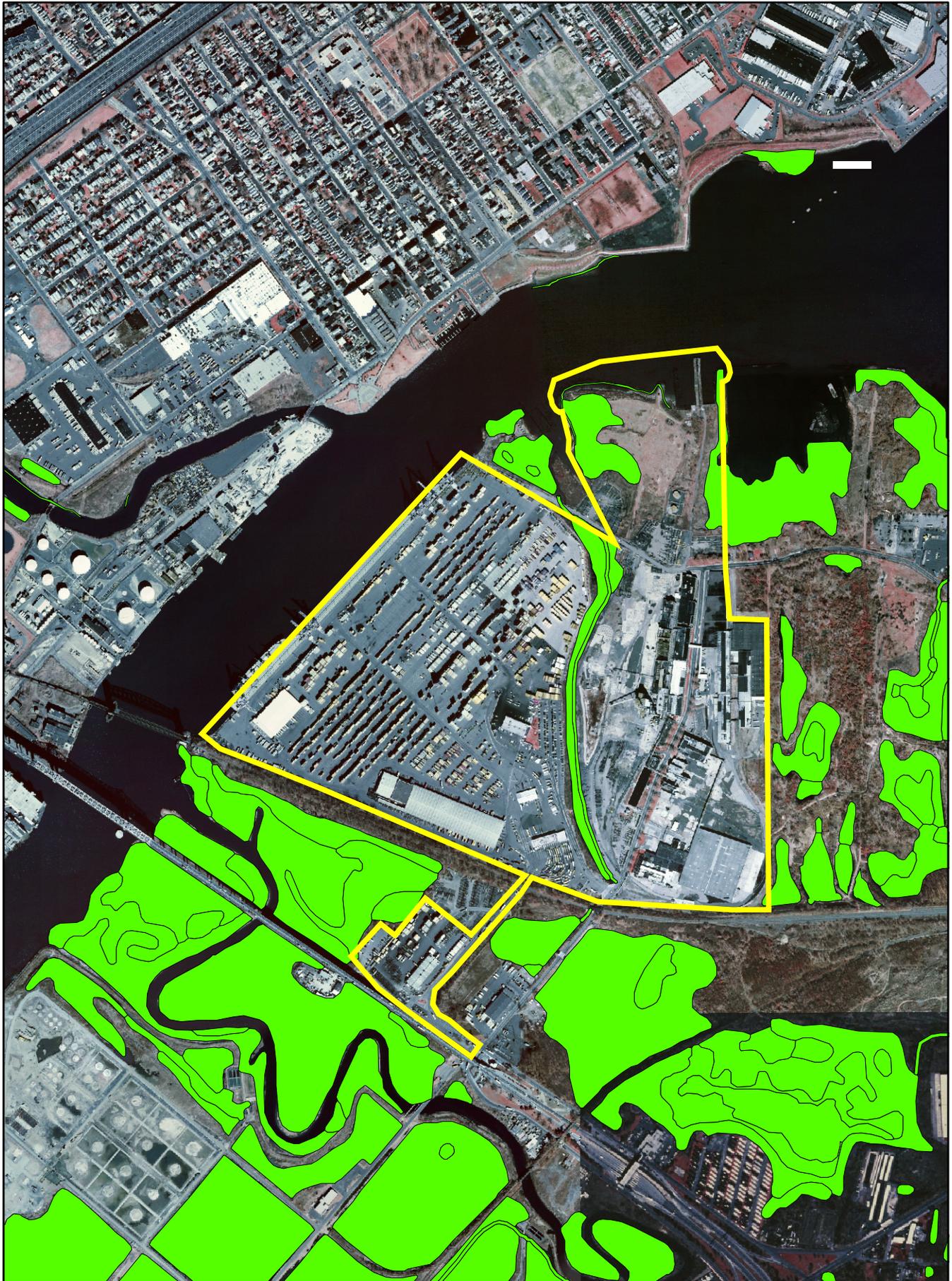


Figure 3-18:  
Federal Wetlands Map  
Howland Hook Marine Terminal

A NOAA navigation chart (No. 12333) for the area indicates water depths around Port Ivory at roughly 10 feet deep or less to the edge of the maintained navigation channel and between 28 and 30 feet deep along the existing berth at HHMT.

NJDEP and NYSDEC have classified the waters adjacent to HHMT as SE3 and SD waters, respectively. SE3 waters are saline estuarine surface water suitable for maintenance and migration of fish populations, migration of diadromous fish, maintenance of wildlife, and secondary recreation. SD waters are saline surface waters suitable for fishing and fish survival.

The water quality data from the Harbor Survey (NYCDEP 2001-2003) sampling stations in the vicinity of HHMT indicate that water quality standards for both DO and pH were consistently met.

A strip of the existing terminal, adjacent to the Arthur Kill, which varies in width from roughly 1000 to 1500 feet, is mapped as “Other Flood Areas” - Zone X (includes those areas with an annual chance of flooding of 0.2%) FIRMs 3604970123E and 124E. The remainder of the existing Howland Hook Marine Terminal is mapped as “Other Areas” - Zone X which are areas outside the 0.2% area. The shoreline of the undeveloped portion of Howland Hook/Port Ivory is designated as a “Special Flood Hazard Area” – Zone AE, (subject to the 100-year flood) with a BFE of eight feet, as are Bridge Creek, the tidal channel that divides Howland Hook, and the waters of the Arthur Kill just off-shore of Howland Hook and Port Ivory. The inland portion of the Port Ivory site is a mix of “Other Flood Areas” - Zone and “Other Areas” - Zone X. This designation has also been used to describe a thin strip of land on either side of Bridge Creek.

The potential or actual presence of hazardous materials in the vicinity of HHMT was evaluated through a review of site histories and from an environmental database search which is summarized in Table 3-6. Sites involving significant storage, use, disposal or release of hazardous materials involving the port facility or adjacent facilities are summarized in Table 3-17 and Table 3-18, respectively. Many of the sites found within the database search (e.g., Chemical Control Corporation, which is on the National Priorities List (Superfund)) are located in New Jersey, directly across the Arthur Kill from Howland Hook. Additionally, 25 state hazardous waste sites located within a 1-mile radius of HHMT are located in New Jersey. These sites, which would not contribute to upland impacts due to their separation from HHMT by the Arthur Kill and the Kill Van Kull waterways, are not included in Table 3-18.

Leakage of petroleum products from former storage tanks has caused contamination of soil and groundwater at the former Proctor & Gamble/Port Ivory site, which is currently undergoing remediation as part of NYSDEC’s Voluntary Cleanup Program. Additional sources of contamination may exist at Port Ivory, particularly at the former landfill. A significant number of petroleum spills at the neighboring former GATX site have the potential to impact groundwater underlying HHMT.

Most of the ACM found in buildings at Howland Hook has been removed. Remaining ACM located within the facilities is non-friable. LBP is likely to be present within the buildings on the site. Of particular note, ACB and LBP associated with buildings slated for demolition at Port Ivory have been addressed as part of the demolition work.

**TABLE 3-17: HHMT – ON-SITE HAZARDOUS AND REGULATED MATERIALS DATABASE LISTINGS**

RCRA Facilities	EPA ID #/ Generator Size	# Violations/ Status	Petroleum/Chemical Storage Facilities	Database Listing	Tanks/Products Stored				Status
NYC Howland Hook Container Terminal Inc., 300 Western Ave.	NYR000044669/ Small quantity	None	HHMT, 300 Western Ave.	PBS	(5) 4,000-g USTs/diesel and gasoline				Closed- in-place
HHMT, 300 Western Ave.	NYD078174901/ Small quantity	None	Proctor & Gamble, 40 Western Avenue	PBS	(1) 8,000-g UST/ fuel oil (2) 10,000-g USTs/ fuel oil				Removed
NYC HHMT, 300 Western Avenue	NYD020589693/ Small quantity	2/manifest requirements/ resolved	Proctor & Gamble, 40 Western Avenue	MAJOR OIL STORAGE FACILITY	(2) 12,000-g USTs/ fuel oil; (1) 2,000-g UST/ gasoline; (1) 550-g UST/diesel; (1) 1,000-g UST/diesel; (1) 250-g UST/diesel; (1) 3,000-g UST/ diesel; (1) 4,000-g UST/gasoline (2) 420,000-g ASTs/ fuel oil; (1) 275-g AST/ diesel; (1) 250-g AST/diesel; (1) 550-g AST/ diesel				Inactive
Proctor & Gamble Manufacturing Co., 40 Western Avenue	NYD000249961/ Small quantity	1/compliance achieved	Proctor & Gamble Mfg Co. – Port Ivory, 40 Western Avenue	CHEMICAL BULK STORAGE FACILITY	(1) 10,000-g UST/ other (2) 405,000-g ASTs/sodium hydroxide (1) 12,500-g AST/sodium hydroxide (1) 650-g AST/sodium hydroxide				Closed
HHMT, 239 Western Avenue South	NYR000124222/ Large quantity	None	<b>NY VCP</b>	<b>Status</b>	<b>Date</b>	<b>Spills/Leaking Tanks Sites</b>	<b>Product/ Amount</b>	<b>Cause/ Impact</b>	<b>Status</b>
<b>CERCLIS-NFRAP</b>	<b>Status</b>	<b>Date</b>	Proctor & Gamble Mfg Co. – Port Ivory, 40 Western Avenue	Active/ 3 ID #s assigned: V00615, V00674, and V00675	On- going as of 2004	Proctor & Gamble	Toluene/ not reported	Discovery/land impact	Closed
HHMT, 300 Western Avenue	Removal action only	Completed in 1989.				Proctor & Gamble	Fuel oil/ not reported	Discovered during tank pull/ land impact	Active

Source: Environmental Data Resources, 2004.

**TABLE 3-18: HHMT – OFF-SITE HAZARDOUS AND REGULATED MATERIALS DATABASE LISTINGS\***

<b>Spills/Leaking Tanks Sites</b>	<b>Product/Amount</b>	<b>Cause/Impact</b>	<b>Status</b>
Coca Cola, 400 Western Avenue	Gasoline/ not reported	Leaking gasoline tank/land and groundwater	Closed
GATX Terminal, 500 Western Avenue	Multiple gasoline and fuel oil spills/ total amount unknown	Former petroleum terminal/tank farm/extensive soil and groundwater contamination.	Most Spills Active
<b>Petroleum/Chemical Storage Facilities</b>	<b>Database Listing</b>	<b>Tanks/Products Stored</b>	<b>Status</b>
Coca Cola, 400 Western Avenue	PBS	(4) diesel USTs (size not reported)	Closed or removed
GATX Terminal, 500 Western Avenue	MOSF	Fuel oil and gasoline ASTS, various sizes	All tanks removed
<b>US Brownfields</b>		<b>Description</b>	
Mariners Marsh		EPA Brownfields Pilot Site	

Source: Environmental Data Resources, 2004.

## **D. PORT NEWARK MARINE TERMINAL, NEWARK, NEW JERSEY**

Port Newark Marine Terminal (Port Newark) is a 930-acre site, located in the southeastern waterfront section of Newark, New Jersey. The site is bounded by Newark Bay Bridge on the north, Elizabeth Channel and Port Elizabeth on the south, Newark Bay on the east, and the New Jersey Turnpike and Newark Liberty International Airport on the west (Figure 3-19). Port Newark is currently occupied by numerous warehouse and distribution companies, several import and export container and freight companies, and several automobile import/export companies.

Situated in Newark's East Ward, Port Newark is located within the Newark Airport and Port Newark neighborhoods. Land uses immediately adjacent to Port Newark consist primarily of warehousing, light industry, associated freight transportation facilities, and port-related commercial uses, storage containers, stacked trailers, and associated parking facilities. The nearest residential area, the Ironbound, is located more than one mile northwest of Port Newark (Figure 3-20). The New Jersey Turnpike, U.S. Route 78, U.S. Routes 1&9 and the Oak Island Rail Yards separate these residential uses from Port Newark. Land uses within the Ironbound include moderately sized industrial properties related to the Port and two- and three-family detached houses, small apartment buildings, and interspersed community facilities.

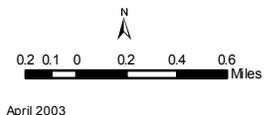
Port Newark is zoned Third Industrial District (I3) (Figure 3-21). The nearest residential zone, the Ironbound neighborhood, is zoned Third Residential District (R3).

Situated among industrial uses and Newark Liberty International Airport, Port Newark has a limited residential population. Approximately 3,700 people live within ½-mile of Port Newark, in the cities of Newark and Elizabeth, of which nearly 60 percent are African-American, 21 percent are Hispanic or Latino, 4 percent are non-Hispanic White, 3 percent are Asian, and 1 percent are American-Indian and Alaskan Native (Table 3-19). The 1999 median income ranged from approximately \$25,000 to over \$50,000 (Table 3-20). Approximately 33 percent of total households and 35 percent of individuals lived below the poverty level. Unemployed persons totaled 203 or less than 4 percent of the population 16 years of age and older.

Other than the buildings supporting the land uses described above, the New Jersey Turnpike, at elevations up to 20 feet above grade, is the most prominent manmade visual feature near the port site. The Turnpike provides the best opportunity for eastward views of Newark Bay and the expanse of low-rise buildings and trailers/containers that are symbolic of this port-related commercial and warehousing area.

A noteworthy feature of the area is the significant heavy truck traffic that traverses local roadways (e.g., North Avenue) to and from the port site and the intersecting streets that provide access to inland warehouse/distribution and large retail commercial facilities. These trucks are mostly tractor-trailers transporting containers or other cargo. Also influencing the physical scale of the area are the freight rail facilities to the north and south of the port facilities.

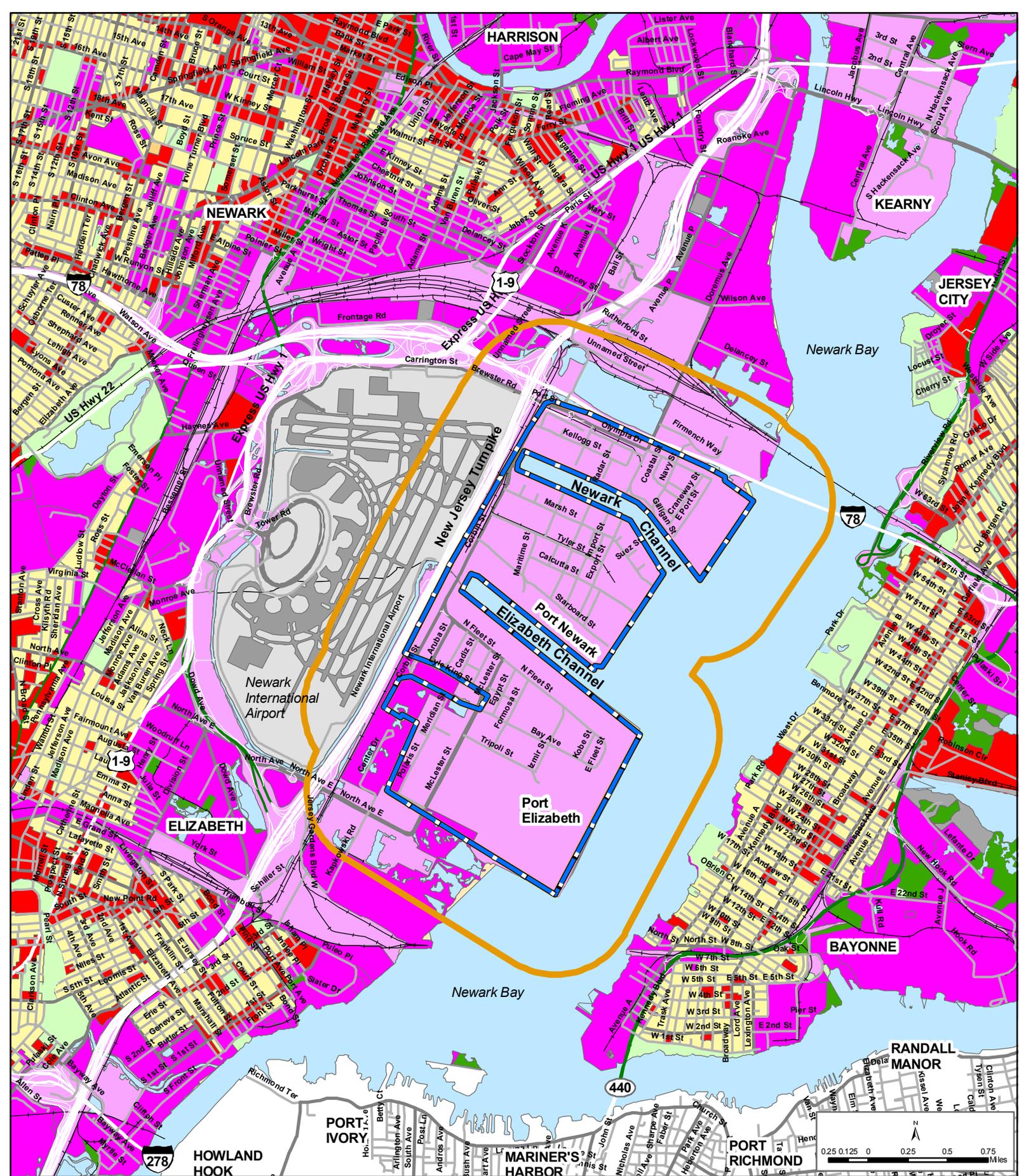
As shown in Table 3-21, three historic resources are located within ½-mile of Port Newark (Figure 3-22). The Newark and Elizabeth Branch of the Central Railroad of New Jersey Mainline Corridor Historic District, located immediately west of Port Newark, is eligible for inclusion in the National Register of Historic Places. Three Newark Liberty International Airport structures (the Administration Building, the Brewster Hangar, and the Medical Building) are listed in the National and State Registers of Historic Places. In addition, the New Jersey Turnpike is in the process of receiving an opinion of eligibility from the New Jersey State Historic Preservation Office for inclusion in the National Register of Historic Places.



**Legend**

 Terminal Boundary

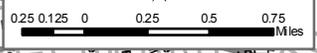
**Figure 3-19**  
**Location Map:**  
**Port Newark/Port Elizabeth Marine Terminals**

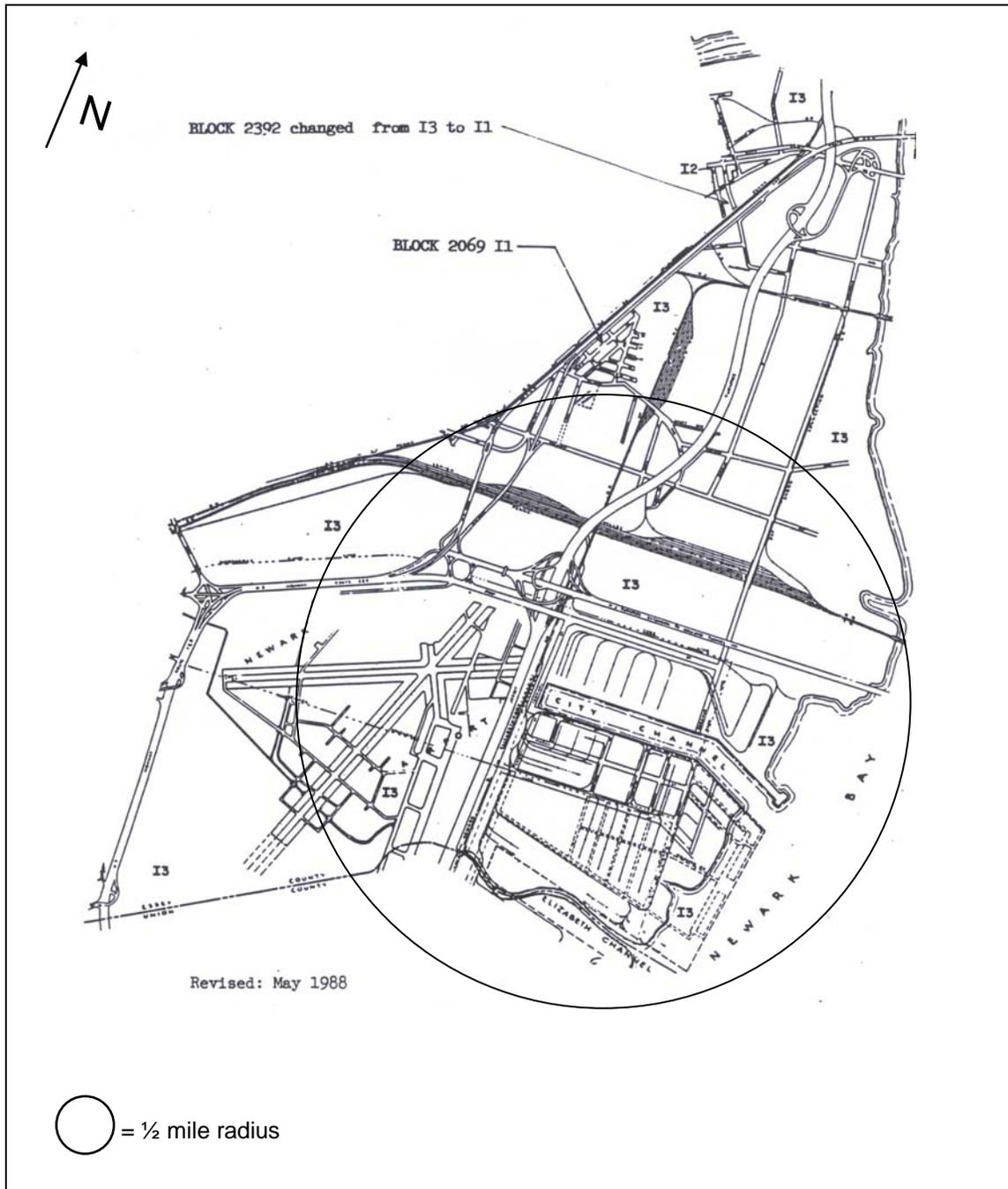


Legend	
<span style="display:inline-block; width:15px; height:15px; background-color:yellow; border:1px solid black;"></span> Residential	<span style="display:inline-block; width:15px; height:15px; background-color:lightblue; border:1px solid black;"></span> Transportation/Communication/Utilities
<span style="display:inline-block; width:15px; height:15px; background-color:red; border:1px solid black;"></span> Commercial	<span style="display:inline-block; width:15px; height:15px; background-color:lightblue; border:1px solid black;"></span> Water/Stream/Wetlands/Lake
<span style="display:inline-block; width:15px; height:15px; background-color:magenta; border:1px solid black;"></span> Industrial/Warehouse/Built-Up	<span style="display:inline-block; width:15px; height:15px; background-color:lightgreen; border:1px solid black;"></span> Parks/Recreation/Open Space
<span style="display:inline-block; width:15px; height:15px; border:2px solid blue;"></span> Terminal Boundary	<span style="display:inline-block; width:15px; height:15px; border:2px solid orange;"></span> 1/2 Mile Buffer
<span style="display:inline-block; width:15px; height:15px; background-color:orange; border:1px solid black;"></span> Agriculture	<span style="display:inline-block; width:15px; height:15px; background-color:green; border:1px solid black;"></span> Forest/Brushland
	<span style="display:inline-block; width:15px; height:15px; background-color:gray; border:1px solid black;"></span> Vacant Land

**Figure 3-20:**  
**Port Newark Marine Terminal**  
**Land Use**

January 2005





Source: City of Newark Zoning Map, 1988.

**Figure 3-21: Zoning Map – Port Newark Marine Terminal**

**TABLE 3-19: PORT NEWARK – RACIAL CHARACTERISTICS**

Census Tract*	Municipality	Total Population	Selected Race and Ethnicity (Non-Hispanic)										Hispanic/Latino**	
			White		Black or African-American Alone		American-Indian, Alaskan Native Alone		Asian Alone		Native Hawaiian/ Other Pacific Islander Alone			
			Population	Percentage	Population	Percentage	Population	Percentage	Population	Percentage	Population	Percentage	Population	Percentage
98	Newark	3,338	45	1.3%	2,020	60.5%	21	0.6%	22	0.7%	0	0.0%	706	21.2%
301	Elizabeth	334	91	27.2%	106	31.7%	0	0.0%	90	26.9%	0	0.0%	47	14.1%
<b>Study Area Total</b>		<b>3,672</b>	<b>136</b>	<b>3.7%</b>	<b>2,126</b>	<b>57.9%</b>	<b>21</b>	<b>0.6%</b>	<b>112</b>	<b>3.1%</b>	<b>0</b>	<b>0.0%</b>	<b>753</b>	<b>20.5%</b>

Source: United States Bureau of the Census. 2000 Census Summary File 1 and Summary File 3.

\* Located partially or entirely within ½-mile of site

\*\* Hispanic/Latino was counted as a separate racial category by the 2000 U.S. Census

**TABLE 3-20: PORT NEWARK – SELECTED INCOME AND POVERTY CHARACTERISTICS**

Census Tract*	Municipality	Households				Individuals			
		Total Number of Households	1999 Median Household Income	Households Below the Poverty Level	% of Households Below the Poverty Level	Individuals Below the Poverty Level	% of Individuals Below the Poverty Level	Unemployed Persons 16 Years and Older	% Unemployed Persons 16 Years and Older
98	Newark	38	\$15,417	14	36.8%	33	33.3%	42	4.1%
334	Elizabeth	23	\$31,058	6	26.1%	6	5.3%	203	4.6%
<b>Study Area Total</b>		<b>61</b>	<b>N/A</b>	<b>20</b>	<b>32.8%</b>	<b>39</b>	<b>34.5%</b>	<b>203</b>	<b>3.7%</b>

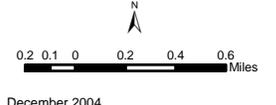
Source: United States Bureau of the Census. 2000 Census Summary File 1 and Summary File 3.

\* Located partially or entirely within ½-mile of site

N/A - Not Available



**Figure 3-22: Port Newark Marine Terminal: Community, Recreational/Open Space, and Historical Resources**



- Legend**
- Terminal Boundary
  - 1/2 Mile Buffer

**TABLE 3-21: PORT NEWARK - COMMUNITY, RECREATIONAL/OPEN SPACE AND HISTORIC RESOURCES**

Map Key**	Name*	Address
<b>Community Services</b>		
1	Seaman's Church Institute of New York and New Jersey	118 Export St
2	Stella Maris Roman Chapel	170 Corbin St
<b>Historic Resources</b>		
3	Central Railroad of New Jersey, Mainline Corridor Historic District	immediately west of Port Newark
4	Newark International Airport (Administration Bldg, Brewster Hangar, and Airport Medical Bldg)	
5	New Jersey Turnpike	

Source: ESEC, 2004

\* Located within ½ mile of site

\*\* See Figure 3-22.

Two community facilities, which principally cater to the port industry, are located within the Port Newark complex (Table 3-21). The Seaman's Church Institute of New York and New Jersey, located at 118 Export Street, provides food, recreation, internet/telephone access and other services to port employees and truckers, as well as assistance with family, employment, medical and contractual concerns. Stella Maris Roman Catholic Chapel, located at 170 Corbin Street, conducts daily mass and provides counseling services for port-related employees. Additional community services are located one to two miles northwest of Port Newark in the Ironbound neighborhood of the City of Newark.

Direct roadway access to Port Newark from the north (from U.S. Routes 1&9) is via Doremus Avenue. Interchange 14 of the New Jersey Turnpike provides direct access to Port Street, which links to Port Newark. Access to the site from the south is from North Avenue, which provides access to neighboring Port Elizabeth (via McLester Street). Corbin Street provides internal access between Port Elizabeth and Port Newark. About 55 percent of all current traffic in the Port Newark/Elizabeth area is automobile traffic, while approximately 90 percent of all truck traffic is estimated to be port-related.

Freight rail facilities serving Port Newark include the Oak Island Terminal, the Doremus Avenue Auto Terminal, and Portside. Just south of the site, within Port Elizabeth, freight facilities include ExpressRail, E-Port (Trumbull Street Yard), and Norfolk Southern E-Rail Yard.

Port Newark is located in the New York-New Jersey Metropolitan Region, which is designated by the USEPA as a non-attainment area for ozone and PM<sub>2.5</sub>, and a maintenance area for CO. The area is designated as being in attainment for all of the other pollutants.

The latest ambient air quality data were collected in 2004 by the NJDEP at monitoring stations located at 2828 Kennedy Boulevard in Jersey City, 7 Broad Street in Elizabeth, Veterans Park on Newark Bay in Bayonne, 18<sup>th</sup> Avenue in Newark, and at 355 Newark Avenue in Jersey City. The data showed CO, PM<sub>2.5</sub>, and PM<sub>10</sub> levels that comply with NAAQS.

In addition to the port-related activities, the principal sources of noise within and immediately surrounding Port Newark are motor vehicles and trucks traveling on Port Street, Terminal Street, and Corbin Street. With the exception of the Stella Maris Chapel (170 Corbin Street), no noise-sensitive land uses are located along these roadways or within 1,500 feet of Port Newark. The nearest residences are located more than one mile northwest of the port site in the Ironbound neighborhood.

Due to the highly developed and industrialized nature of the site, Port Newark has limited natural habitat. Small patches and strips of successional old field and shrubland communities have developed in disturbed

areas along roadways, near buildings and paved lots, as well as within upland riprap areas on the northeast end of Port Newark North (in the vicinity of the Toyota facility). The remainder of the shoreline is hardened (Estuarine Riprap/Artificial Shore). Surrounding water areas are littoral and sublittoral Zones. Adjacent to the site and along the north boundary are found marine intertidal mudflats, tidal creek, salt shrub, and shallow emergent Marsh that have been mapped by New Jersey Department of Environmental Protection (NJDEP).

Few wildlife species, including Canada geese, song sparrows, and white-throated sparrows, were observed during a site visit (September/October 2004). However, the sharp-shinned hawk (*Accipiter striatus*), a special concern species in New York, was identified on-site.

State and Federally protected species include the four turtles and shortnose sturgeon identified in Table 3-4 (Section A). The State endangered peregrine falcon (*Falco peregrinus*) has been documented on the port site and foraging habitat for colonial waterbirds, black-crowned night herons, and yellow-crowned night herons, all threatened species in New Jersey, have been documented at Port Newark (NJDEP 2004). The checkered white butterfly (*Pontia protodice*), savannah sparrow (*Passerculus sandwichensis*), and upland sandpiper (*Bartramia longicauda*) are threatened or endangered species that have also been documented within ¼-mile of Port Newark (USFWS 2004b). According to USFWS, no federally protected species were identified on or adjacent to Port Newark. However, an occasional transient bald eagle (*Haliaeetus leucocephalus*) is known to use the area. EFH species are identified in Table 3-5. The list of federally managed species and their EFH are updated as additional information about a particular species' life history or population status changes. At such time as any project is proposed, the lead agency should review the status of EFH and the federally and state managed species to obtain the current designations.

NJDEP has no freshwater wetlands mapped at the site and none were observed during a site visit (Figure 3-23). Two palustrine freshwater wetlands on Port Newark South in the vicinity of the road salt piles are depicted on a NWI Map (Jersey City Quadrangle) (Figure 3-24).

The NWI map shows intertidal (irregularly flooded and regularly flooded) wetlands present along the shoreline of Port Newark North, in the vicinity of a Toyota Facility. NJDEP has no intertidal wetlands mapped within the site. A strip of *Spartina alterniflora* (saltwater cordgrass) representative of the low salt marsh community was observed just off the sandy shoreline. The hardened shoreline surrounding the rest of Port Newark (Estuarine Riprap/Artificial Shore) comprises steel and wood bulkheads, large-sized riprap, concrete, and blacktop. The surrounding open water habitat has been designated by NJDEP as "unknown tidal regime, intermittently flooded, subtidal" habitat.

NOAA navigation charts (No. 1233 and No. 12337) for the area of Newark Bay that surrounds Port Newark indicate maintained channels on the north (Port Newark Channel), south (Port Elizabeth Channel), and east (Port Newark Pierhead Channel) of Port Newark South and a maintained channel (Port Newark Channel) to the south of Port Newark North. The area immediately east of Port Newark North is very shallow, ranging from one to three feet between the shoreline and the western edge of the Newark Bay North Reach Channel.

NJDEP has classified the water adjacent to Port Newark as SE3 waters. SE3 waters are saline estuarine surface water suitable for maintenance and migration of fish populations, migration of diadromous fish, maintenance of wildlife, and secondary recreation. Data collected in Newark Bay in 1998-1999 indicate the New Jersey water quality standards had been met (USACE-NYD, 1999).

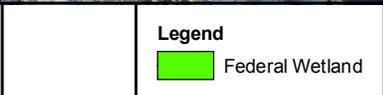
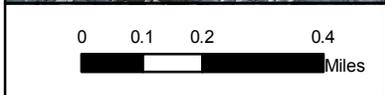


Figure 3-23:  
Federal Wetlands Map  
Port Newark

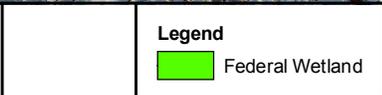
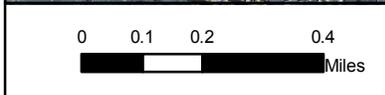


Figure 3-24:  
Federal Wetlands Map  
Port Newark

A large portion of Port Newark Marine Terminal lies within the 100-year to 500-year floodplain, Zone X (FIRMs 340189 0011C and 340189 0010C). The remainder of Port Newark South which is adjacent to Port Newark Channel and a swath through the central eastern portion of Port Newark North all fall within a special flood hazard area which is inundated by 100-year floods (Zone AE). The BFE for these areas is 9.5 feet. The water adjacent to Port Newark (Newark Bay and Port Newark Channel) is also mapped as Zone AE with the same BFE.

Information related to hazardous materials in the vicinity of Port Newark and the other New Jersey port sites (Port Elizabeth, Port Jersey, The Peninsula at Bayonne Harbor) was obtained through a search of hazardous materials records (Table 3-22). Sites involving significant storage, use, disposal or release of hazardous materials involving the port facility or adjacent facilities are summarized in Table 3-23. Many years of operation by numerous former and current tenants at Port Newark have resulted in soil and groundwater contamination from leaking storage tanks, poor housekeeping practices, and past disposal practices. Contaminants of concern include heavy metals, creosote, and petroleum constituents.

Many years of operation by numerous former and current tenants at Port Newark have resulted in soil and groundwater contamination from leaking storage tanks, poor housekeeping practices, and past disposal practices. Contaminants of concern include heavy metals, creosote, and petroleum constituents.

During a site visit (October 2004), additional information was obtained regarding areas or facilities with contamination issues. For example, the former Beazer, Inc. site at Maritime and Tyler Streets is contaminated with creosote. This former wood-treating facility was decommissioned, contaminated soil was remediated and capped, and a chain link fence surrounding the site was installed. Contaminated groundwater is being monitored and remediation system has been installed to remove the dense non-aqueous phase liquid (DNAPL). The capping and fencing has eliminated exposures to soil contamination and no off-site migration of contaminated groundwater has been identified.

The BP (British Petroleum) fuel oil terminal at the northern boundary of Port Newark is contaminated from petroleum releases. Heavy metal contamination is also present within the soils located at the existing metal scrap yard. A total of 61 State hazardous waste sites were reported in the one-mile search area (Table 3-23). The presence of a significant number of hazardous waste sites and other sources of contamination in the heavily industrialized search area, such as spills and leaking tanks, will continue to act as a source for off-site groundwater contamination.

The majority of the buildings located at Port Newark were constructed prior to 1980. Therefore, due to the age of the structures, it is likely that many of the buildings contain ACM and LBP. An ACM survey was previously conducted by the Port Authority and any friable ACM located at Port Newark has been abated.

As of 1999, LBP surveys have not been conducted at the site facilities.

**TABLE 3-22: SUMMARY OF ENVIRONMENTAL DATABASE SEARCH RESULTS - NEW JERSEY PORTS**

Databases Searched for New Jersey Ports	Port Newark/ Elizabeth	Port Jersey	PAB	Databases Searched for New Jersey Ports	Port Newark/ Elizabeth	Port Jersey	PAB
ASTM Databases				Non-ASTM Databases (continued)			
CERCLIS-No Further Remedial Action Planned (NFRAP)	Yes/14	--	Yes/2	Formerly Used Defense Sites (FUDs)	--	No/1	--
Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)	Yes/1	--	No/1	Hazardous Materials Information Reporting System (HMIRS)	Yes/145	--	--
Emergency Response Notification System (ERNS)	Yes/27	--	--	Historic Landfills	--	--	--
Leaking Underground Storage Tanks (LUST)	Yes/86	Yes/11	Yes/29	Material Licensing Tracking System (MLTS)	--	No/1	No/1
National Priority List (NPL) and Proposed NPL	--	--	--	Mines Master Index File (MINES)	--	--	--
New Jersey Known Contaminated Sites (KCS)	Yes/61	Yes/28	Yes/43	National Priority List Deletions (Delisted NPL)	--	--	--
RCRA Large (LOG) and Small (SOG) Quantity Generators	Yes/18/96	Yes/0/16	Yes/3/16	NJ Major Facilities	No/4	--	--
RCRA Transport/Treat, Store, or Dispose (TSD) of Hazardous Wastes	Yes/10	--	Yes/2	NJ Publicly Funded Cleanup Sites (NJ PF)	--	--	--
Resource Conservation and Recovery Act (RCRA) Corrective Action Report (CORRACTS)	Yes/10	--	Yes/3	NJ Releases	Yes/86	Yes/7	Yes/6
State Registered Recycling Facility List (SWRCY)	--	--	--	NJ Spills	Yes/239	Yes/12	Yes/15
State Registered USTs (UST)	Yes/52	Yes/15	Yes/24	NJPDES	Yes/35	No/3	Yes/3
State Solid Waste Landfills	Yes/2	--	--	PCB Activity Database System (PADS)	Yes/2	--	Yes/1
Non-ASTM Databases				RCRA Administrative Action Tracking System (RAATS)	--	--	Yes/1
AUL (Closed Sites with Restrictions)	Yes/8	--	--	Records of Decision (ROD)	--	--	--
Brownfields: Institutional Control Sites	--	No/2	No/1	Section 7 Tracking Systems (SSTS)	--	--	--
CHROME	--	No/2	No/1	Solid Waste Facility Directory (HIST LF)	No/3	--	--
Coal Gas Sites	--	--	--	Superfund (CERCLA) Consent Decrees (CONSENT)	--	--	--
Department of Defense Sites (DOD)	--	--	--	Superfund Liens (NPL Liens)	--	--	--
Dry Cleaners List	--	--	--	Toxic Chemical Release Inventory System (TRIS)	Yes/4	--	--
Facility Index System/Facility Identification Initiative Program Summary Report (FINDS)	Yes/167	Yes/19	Yes/17	Toxic Substances Control Act (TSCA)	Yes/7	--	--
Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA)/TSCA Tracking System - (FTTS)	Yes/6	--	--	US Brownfields	--	--	--

All search radii performed to ASTM E-1527-00 standards for Phase 1 Environmental Assessments.

Yes – listings identified on site. No – no listings identified on site. /# - total listings identified in search area. -- no database listings in search area. Or – orphan site, unmapped.

PAB – Peninsula at Bayonne.

**TABLE 3-23: PORT NEWARK/PORT ELIZABETH – SEARCH AREA HAZARDOUS AND REGULATED MATERIALS DATABASE LISTINGS\***

RCRA Facilities	Generator Size	# Violations/ Status	RCRA Facilities	Generator Size	# Violations/ Status	CERCLIS - NFRAP	Status
Port Authority NJ Marine Terminals 260 Transit Street Newark Heights, NJ 07040	Large quantity	Several/ latest in 1995	Maier Terminals Fleet Street Elizabeth, NJ 07201	Large quantity	None	Kopper Company Inc. Maritime and Tyler Port Newark, NJ 07114	Archived in 1989
Avis Rent A Car Systems Inc., 30-116 Port Street Newark, NJ 07101	Large quantity	None	Universal Maritime Services 5080 McLester Street Elizabeth, NJ 07207	Large quantity	Several/ monetary penalties/ latest in 2000	Central Railroad of NJ 2-330 North Avenue E Elizabeth, NJ 07201	Archived in 1989
A Z Container FGT Station 291 Marlin Street Newark, NJ 07114	Large quantity	None	New England Motor Freight, Inc. 1-71 North Avenue East Elizabeth, NJ 07201	Large quantity	6/latest issued in 2003	<b>Spills/Leaking Tanks Sites</b>	
Koppers Company Inc. Maritime and Tyler Newark, NJ 07114	Large quantity	Several/ latest in 1989	Koppers Company Inc. Maritime and Tyler Newark, NJ 07114	TSD Facility	No information provided	Port Newark/Port Elizabeth	
Port Authority of NY & NJ – Metcalf and Eddy 141 Suez Street and Marsh Street, Port Newark, NJ 07114	Large quantity	None	Koppers Company Inc. Maritime and Tyler Newark, NJ 07114	CORRACTS	Source area of soil and groundwater contamination removed	A total of 239 spills and 86 releases were reported in the database search. It is not practical to list the spills here.  Noteworthy spills include historic releases at the BP fuel storage tanks at Port Newark; and releases from former gasoline USTs at Toyota Logistics Services.	
Ethyl Petroleum Additives 1020 North Fleet Street Elizabeth, NJ 07201	Large quantity	None	<b>CERCLIS</b>		<b>Status</b>		
Schweizerhall Incorporated 196 Maracaibo Street Port Newark, NJ 07114	Large quantity	None	T&J Landfill 70 Port Street Newark, NJ 07114	PA completed in 1985 The CERCLIS site status is listed as Low.			The majority of the spills reviewed were related to motor vehicle accidents and leaking USTs.
Conterm 5130 Mc Lester Street 2nd Floor Elizabeth, NJ 07201	Large quantity	1/issued in 2000					

\* Located within one mile of site

**TABLE 3-23: PORT NEWARK/PORT ELIZABETH – SEARCH AREA HAZARDOUS AND REGULATED MATERIALS DATABASE LISTINGS \*(CONTINUED)**

Petroleum/Chemical Storage Facilities	Tanks/Products Stored/Status	Petroleum/Chemical Storage Facilities	Tanks/Products Stored/Status	Petroleum/Chemical Storage Facilities	Tanks/Products Stored/Status	Petroleum/Chemical Storage Facilities	Tanks/Products Stored/Status
Consolidated Freight 300 Port Street Newark, NJ 07114	(2) fuel oil USTs/diesel/ Removed	BP Marine Americas Coastal Street Newark, NJ 07114	(3) USTs/waste oil, fuel oil, other/ Removed; (2) USTs/ gasoline, other/CIP	Maersk/Universal 231 Tyler Street Newark, NJ 07114	(1) UST/ waste oil/ Removed	Universal Maritime Service Inc. Tripoli & McLester Street, Elizabeth City, NJ 07207	(8) USTs/waste oil, diesel, fuel oil/Removed (2) USTs/gasoline, diesel/Active/in compliance
Toyota Logistical Service, Inc. 390 Port Street East Newark, NJ 07114	(10) USTs/gasoline, kerosene and various fuel oils; (3) USTs/ kerosene and fuel oil/ Removed or CIP	Avis Rent A Car Systems 30-116 Port Street Newark, NJ 07101	(5) USTs/ gasoline, diesel, waste oil, motor oil, other/Active, in compliance	Maersk Container Services 231 Tyler Street Newark, NJ 07114	(5) USTs/ gasoline, fuel oils, diesel/ Active (1) UST/fuel oil/ Removed	Maher Terminals Berth 80, 4020 Tripoli Street, Elizabeth City, NJ 07201	(8) USTs/ diesel, gasoline, fuel oil, waste oil/ Removed
Vehicle Processing Center 309 Port Street Newark, NJ 07114	(2) USTs/gasoline/ Removed	Highway Freight Inc. 147 Corbin Street Newark, NJ 07114	(1) UST/gasoline/ Removed	Maher Terminal @ Port Elizabeth, North Fleet Street, Elizabeth City, NJ 07207	(3) USTs/ gasoline, diesel/ Removed (3) USTs/ diesel/ Active	Baron – Blakeslee 140 North Avenue Elizabeth, NJ 07201	(4) USTs/fuel oil, diesel/ Removed
Emery Worldwide 100 Port Street Newark, NJ 07114	(3) USTs/gasoline and various fuel oils/Removed (1) UST/fuel oil/CIP	Kent Steel Corp. Bldg 304-Navy Street Newark, NJ 07114	(2) USTs/ gasoline/ Removed	PRMMI Inc. North Fleet Street & Bombay, Elizabeth City, NJ 07207	(2) USTs/diesel/ Removed	Instant Air Freight Co. 250 North Avenue E Elizabeth City, NJ 07201	(2) USTs/gasoline, diesel/Removed
Swift Fuel Stops, Inc. 151 Corbin Street Newark, NJ 07114	(4) USTs/diesel and gasoline/Removed (3) USTs/diesel and gasoline/Active	International Salt Co. 211 Marsh Street Newark, NJ 07003	(2) USTs/not reported/ Removed, closed-in- place	Shipside Services Port Authority, Bay Ave Ext. Elizabeth City, NJ 07201	(2) USTs/ diesel/ Active, non-complaint	Centennial Trucking Co.: 250 North Avenue E, Elizabeth City, NJ 07201	(2) USTs/gasoline, diesel/Removed
Airborne Freight Corp. 98-156 Port Street Newark, NJ 07114	(2) USTs/diesel/ Closed-in-place; (1) UST/ gasoline/Active	Balco Warehouses Co; Marsh and Maritime St. Newark, NJ 07114	(1) UST/ gasoline/ Removed	Sealand Service Inc. 1210 Corbin Street Elizabeth, NJ	(2) USTs/ fuel oil/ Closed-in-place	Northern Real Estate 255 North Avenue Elizabeth City, NJ 07201	(5) USTs/diesel, gasoline/Removed
Dobbs International Services, Inc. 156 Port Street Newark, NJ 07114	(1) UST/gasoline/ Removed	Commercial Carriers 142 Marsh Street Newark, NJ 07114	(2) USTs/ waste oil/ Removed	Maher Terminals Berth 66, Fleet Street Elizabeth City, NJ 07201	(2) USTs/waste oil/ Removed	Instant Air Freight Co. 255 North Avenue Elizabeth City, NJ 07201	(5) USTs/diesel, gasoline/Removed
Conrail Doremus Ave Auto Terminal 860 Doremus Avenue Newark, NJ 07114	(3) USTs//diesel and gasoline/ Removed	Employment Information Systems 117 Tyler Street Newark, NJ 07114	(2) USTs/ gasoline/ Removed	Port Authority Egypt Street Bldg 2270 Elizabeth City, NJ 07201	(3) USTs/gasoline, diesel/ Removed	New England Motor Freight Inc. 1 to 71 North Avenue Elizabeth City, NJ 07201	(4) USTs/diesel, gasoline/Removed
Port of NY & NJ 220 Tyler Street Newark, NJ 07114	(48) USTs/waste oil, various fuel oils, gasoline, diesel/ Removed or CIP	Lumber Dist Gilchrist Bros Inc., Coast and Tyler Street Newark, NJ 07114	(2) USTs/ diesel/ Active, non-compliant	PA Industrial Park Elizabeth, Bay Ave and Corbin St., Maurice River TWP, NJ 07206	(3) USTs/waste oil/ (2) active, (1) CIP		

\* Located within one mile of site

**TABLE 3-23: PORT NEWARK/PORT ELIZABETH – SEARCH AREA HAZARDOUS AND REGULATED MATERIALS DATABASE LISTINGS \*(CONTINUED)**

Known Contaminated Sites	Status	Known Contaminated Sites	Status
Toyota Motor Sales USA Incorporated 309 Port Street Newark City, NJ	On-site sources of contamination exist. Active status (reported as of 1995). Facility ID # NJD980642086.	NJDOT Doremus Avenue Bridge Doremus Avenue Newark City, NJ	On-site sources of contamination exist. Status is reported as Active (reported as of 1994). Facility ID # NJL800068157.
Seaport Auto Service Incorporated 151 Corbin Street Newark, NJ 07114	On-site sources of contamination exist. Active status (reported as of 1996). Facility ID # NJL800179434.	Kent Steel Corp. Navy Street-Bldg 304 Newark, NJ 07114	Case ID # 42022. Closed case(s) with on-site restrictions. No further action (NFA) for partial area of site (status reported as of 1996). Facility ID # NJL000061184. Classification Exemption Area (CEA) has been issued.
Airborne Freight 98-156 Port Street Newark, NJ 07114	Site has two SHWS listings: (1) Case ID #960232. On-site sources of contamination exist. Status is reported as Pending (reported as of 1996). Facility ID # NJL600249544; (2) Case ID #25003. Closed case(s) with on-site restrictions. No further action (NFA) status (reported 1996). Facility ID # NJL600249544. Classification Exemption Area (CEA) has been issued.	M & G Convoy Incorporated Port Newark Shop 142 Marsh Street Newark City, NJ	Site has two SHWS listings: (1) Case ID #9807234. On-site sources of contamination exist. Status is reported as Pending (reported as of 1998). Facility ID # NJD064264575; (2) Case ID #9708185. On-site sources of contamination exist. Status is reported as Pending (reported as of 1997). Facility ID # NJD064264575.
Toys R Us Distribution Center 888-964 Doremus Ave. Newark City, NJ	Case ID # 950517095842. Closed case(s) with on-site restrictions. No further action (NFA) for partial area of site, status as of 1997. Facility ID # NJL800140352. Restrictions have been issued.	Koppers Company Maritime and Tyler Streets Newark City, NJ	On-site sources of contamination exist. Status is reported as Active (reported as of 1998). Facility ID # NJD000542282.
Outdoor Concert Facility Foot of Center Street Newark City, NJ	Case ID # 990708050249. On-site sources of contamination exist. Status is reported as Active (reported as of 1999). Facility ID # NJL800503013.	Realty Transfer Corporation 987-1177 McLester Street Elizabeth City, NJ	On-site sources of contamination exist. Status is reported as Pending (reported as of 1992). Facility ID # NJD986609063.
Guaranteed Overnight Delivery 888 Doremus Avenue Newark City, NJ	Case ID # 990708050517. Closed case(s) with on-site restrictions. No further action (NFA) for partial area of site (status reported 1997). Facility ID # NJL800503393. Restrictions have been issued.	Sealand Terminals 5070 McLester Street Elizabeth City, NJ	Case ID #56496. On-site sources of contamination exist. Status is reported as Active (reported as of 2000). Facility ID # NJL800522930.
Port Authority 260 Kellogg Street Newark City, NJ	Case ID # 93611. On-site sources of contamination exist. Status is reported as Active (reported as of 1999). Facility ID # NJC876026634.	Disposal Areas Incorporated Landfill Kapkowski Rd/ North Avenue Elizabeth City, NJ	On-site sources of contamination exist. Status is reported as Active (reported as of 1999). Facility ID # NJ980771315.
Hudson County Chromate 148 350 Coastal Street Newark City, NJ	On-site sources of contamination exist. Status is reported as Active (reported as of 1990). Facility ID # NJL000001487.	New England Motor Freight 1 to 71 North Avenue Elizabeth City, NJ 07201	Case ID #65621. Closed case(s) with on-site restrictions. No further action (NFA) for partial area of site (status reported as of 1998). Facility ID # NJD981132814. Classification Exemption Area (CEA) has been issued.

Source: Environmental Data Resources, 2004.

\* Located within one mile of site

## **E. PORT ELIZABETH MARINE TERMINAL, ELIZABETH, NEW JERSEY**

Port Elizabeth Marine Terminal (Port Elizabeth) is a 1,254-acre site located along the northeastern waterfront portion (known as Elizabethport) of Elizabeth, New Jersey (Figure 3-25). Surrounding Port Elizabeth are Port Newark and the Elizabeth Channel on the north, North Avenue and sections of undeveloped land on the south, the New Jersey Turnpike on the west, and Newark Bay on the east. The New Jersey Turnpike separates Port Elizabeth from Newark Liberty International Airport located to the west. Currently, the site contains numerous warehouse and distribution companies, several import and export container and freight companies, and several automobile import/export companies.

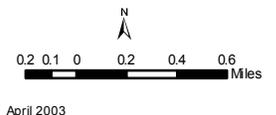
Located within the Elizabethport neighborhood, land uses immediately adjacent to Port Elizabeth consist predominantly of warehousing, light industry, freight transportation facilities, port-related commercial facilities, storage containers, stacked trailers, and associated parking facilities (Figure 3-26). Depending on their configuration at any given time, rows of stacked containers can rise 50 feet above ground level.

Extending ½-mile from Port Elizabeth are numerous warehousing/freight distribution establishments, which are mainly low-rise (one to two stories) in character and are situated on fairly large lots. Immediately west of Port Elizabeth large-scale retail commercial establishments and a private recreation/entertainment center are located on Elizabeth Center Drive/IKEA Drive. To the south, on Kapkowski Road, are the Jersey Gardens Mall, a multiplex cinema, and four recently constructed six- to eight-story hotels. Smaller scale commercial establishments closest to Port Elizabeth include a diner, a fast-food restaurant, and an adult entertainment establishment, which are located approximately one mile west at the North Avenue/Dowd Avenue/Division Street intersection. In addition, mostly retail and commercial uses, including motel and car rental facilities serving Newark Airport, gas stations, and fast food establishments, abut U.S. Routes 1&9. A small number of residential units are located approximately three-quarters of a mile southwest of the port site along Schiller Street.

As shown on Figure 3-27, Port Elizabeth is zoned as a Heavy Industrial Zone (M-3). The nearest residential district (R-3A-Four-Family Residential Zone) is located more than one mile south of Port Elizabeth, near Trumbull Street.

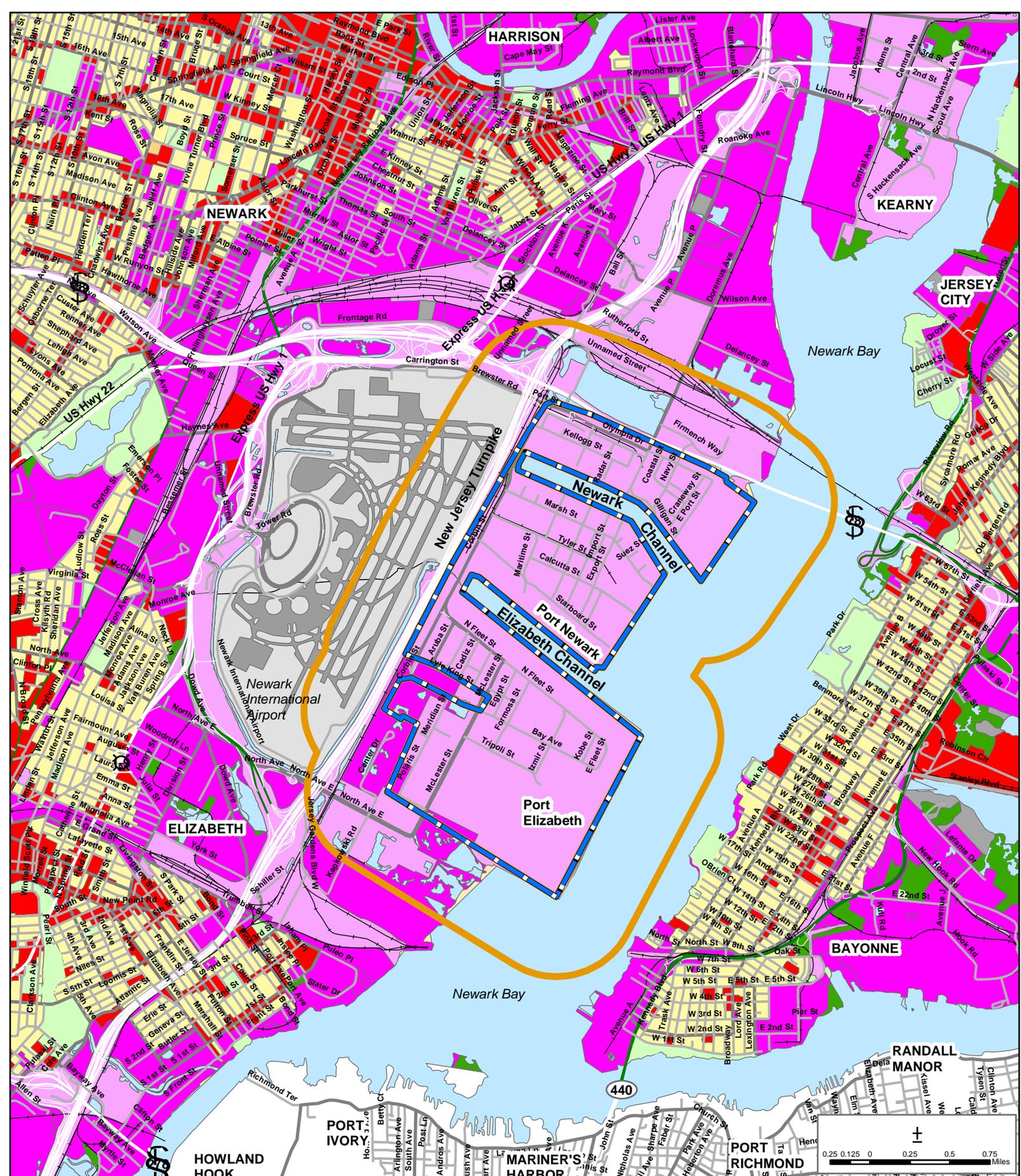
Situated among industrial uses and Newark Liberty International Airport, Port Elizabeth has a limited residential population. Approximately 3,700 people live within ½-mile of Port Elizabeth (in Newark and Elizabeth), of which nearly 60 percent are African-American, 21 percent are Hispanic or Latino, 4 percent are non-Hispanic White, 3 percent are Asian, and 1 percent are American-Indian and Alaskan Native (Table 3-24). The 1999 median income ranged from approximately \$25,000 to over \$50,000 (Table 3-25). Approximately 33 percent of total households and 35 percent of individuals lived below the poverty level. Unemployed persons totaled 203 or less than 4 percent of the population 16 years of age and older.

Views within the Port Elizabeth area include Port Newark, Newark Bay, Bayonne, and the west shore of Staten Island, New York. Existing structures and embankments for segments of the New Jersey Turnpike are also significant physical features of the area. A noteworthy feature that sets the tone of the area's visual context is the significant heavy truck traffic that traverses local roadways to and from the port and the intersecting streets. These trucks are mostly tractor-trailers transporting containers or other cargo. Also influencing the physical scale of Port Elizabeth are the tracks and related infrastructure of several freight rail facilities.



**Legend**  
 Terminal Boundary

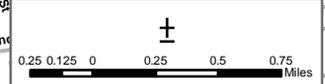
**Figure 3-25**  
**Location Map:**  
**Port Newark/Port Elizabeth Marine Terminals**

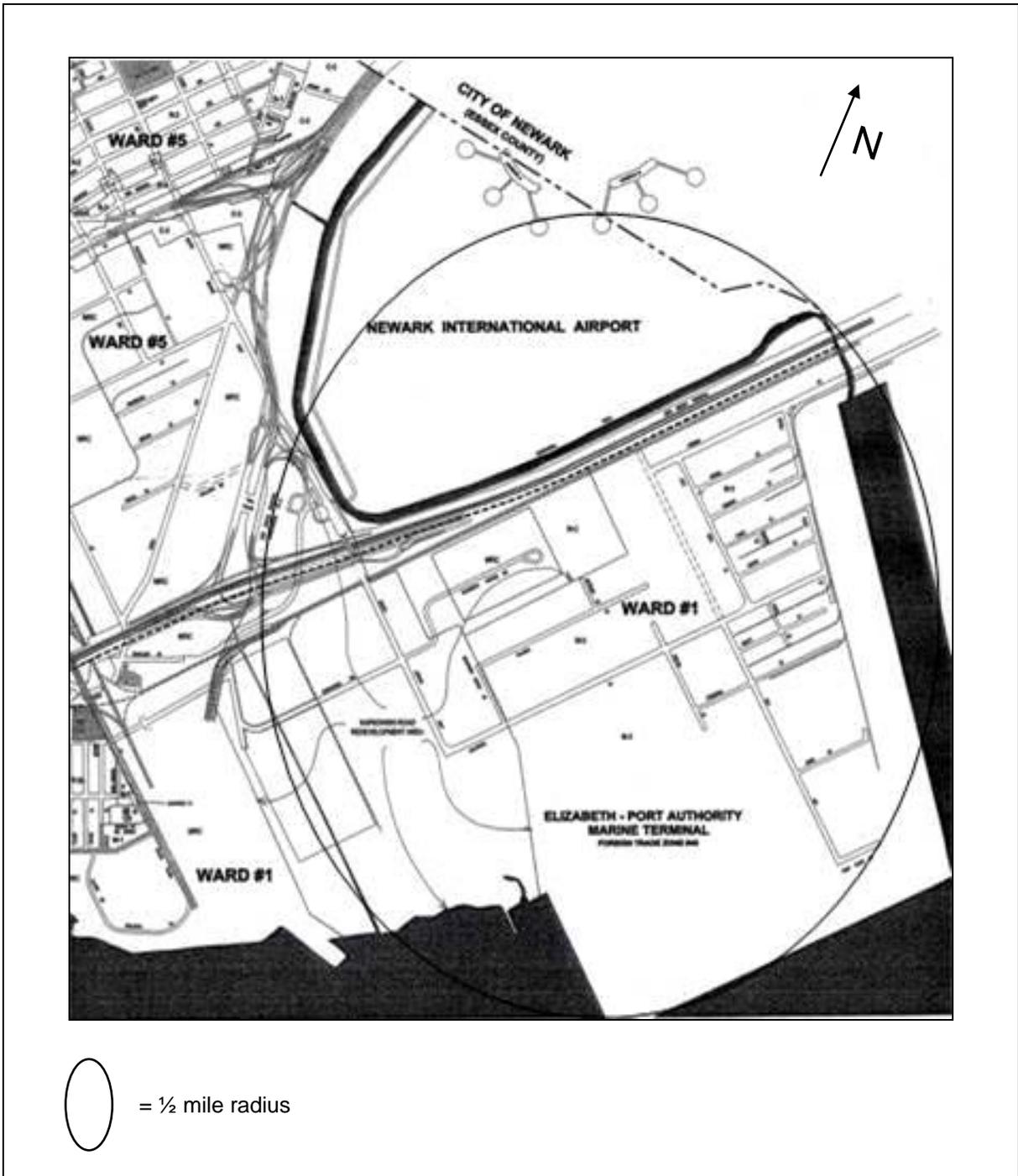


Legend	
	Residential
	Commercial
	Industrial/Warehouse/Built-Up
	Terminal Boundary
	Transportation/Communication/Utilities
	Water/Stream/Wetlands/Lake
	Parks/Recreation/Open Space
	Agriculture
	Forest/Brushland
	Vacant Land
	1/2 Mile Buffer

**Figure 3-26:**  
**Port Elizabeth Marine Terminal**  
**Land Use**

January 2005





Source: City of Elizabeth Zoning Map, 2000.

**Figure 3-27: Zoning Map – Port Elizabeth Marine Terminal**

**TABLE 3-24: PORT ELIZABETH – RACIAL CHARACTERISTICS**

Census Tract*	Municipality	Total Population	Selected Race and Ethnicity (Non-Hispanic)										Hispanic/Latino**	
			White		Black or African-American Alone		American-Indian, Alaskan Native Alone		Asian Alone		Native Hawaiian/ Other Pacific Islander Alone			
			Population	Percentage	Population	Percentage	Population	Percentage	Population	Percentage	Population	Percentage	Population	Percentage
98	Newark	3,338	45	1.3%	2,020	60.5%	21	0.6%	22	0.7%	0	0.0%	706	21.2%
301	Elizabeth	334	91	27.2%	106	31.7%	0	0.0%	90	26.9%	0	0.0%	47	14.1%
<b>Study Area Total</b>		<b>3,672</b>	<b>136</b>	<b>3.7%</b>	<b>2,126</b>	<b>57.9%</b>	<b>21</b>	<b>0.6%</b>	<b>112</b>	<b>3.1%</b>	<b>0</b>	<b>0.0%</b>	<b>753</b>	<b>20.5%</b>

Source: United States Bureau of the Census. 2000 Census Summary File 1 and Summary File 3.

\* Located partially or entirely within ½-mile of site

\*\* Hispanic/Latino was counted as a separate racial category by the 2000 U.S. Census

**TABLE 3-25: PORT ELIZABETH – SELECTED INCOME AND POVERTY CHARACTERISTICS**

Census Tract*	Municipality	Households				Individuals			
		Total Number of Households	1999 Median Household Income	Households Below the Poverty Level	% of Households Below the Poverty Level	Individuals Below the Poverty Level	% of Individuals Below the Poverty Level	Unemployed Persons 16 Years and Older	% Unemployed Persons 16 Years and Older
98	Newark	38	\$15,417	14	36.8%	33	33.3%	42	4.1%
334	Elizabeth	23	\$31,058	6	26.1%	6	5.3%	203	4.6%
<b>Study Area Total</b>		<b>61</b>	<b>N/A</b>	<b>20</b>	<b>32.8%</b>	<b>39</b>	<b>34.5%</b>	<b>203</b>	<b>3.7%</b>

Source: United States Bureau of the Census. 2000 Census Summary File 1 and Summary File 3.

\* Located partially or entirely within ½-mile of site

N/A - Not Available

As shown in Table 3-26, historic resources located within ½-mile of the port site include the Newark and Elizabeth Branch of the Central Railroad of New Jersey Mainline Corridor Historic District and the New Jersey Turnpike (Figure 3-28). NJHPO issued an opinion that the railroad historic district is eligible for inclusion in the National Register of Historic Places. Three Newark Liberty International Airport structures (the Administration Building, the Brewster Hangar, and the Medical Building) are listed in the National and State Registers of Historic Places. The New Jersey Turnpike is in the process of receiving an opinion of eligibility from the NJHPO for inclusion in the National Register of Historic Places. Consistent with the highly developed nature of the area, there is limited potential for archaeological resources.

**TABLE 3-26: PORT ELIZABETH COMMUNITY, RECREATIONAL/OPEN SPACE AND HISTORIC RESOURCES**

Map Key**	Name*	Address
<b>Community Facilities</b>		
1	Benjamin Franklin School	248 Ripley Place
2	Mickey Walker Recreation Center	800-860 Anna St.
3	City of Elizabeth Police Headquarters	One Police Plaza
4	Rescue 1 (Fire Department)	470 Catherine Street
5	Trinitas Hospital	925 East Jersey Street
<b>Open Space/Parklands/Recreational Facilities</b>		
6	Elizabethport Little League	Dowd Ave. b/w Schiller and Chemical Coast
<b>Historic Resources</b>		
7	Central Railroad of New Jersey, Main Line Historic District	
8	The New Jersey Turnpike	
9	Stella Maris Roman Catholic Chapel	
10	Seaman's Church Institute	118 Export Street (Port Newark)

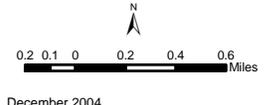
Source: ESEC, 2004

\* Located within ½ mile of site

\*\* See Figure 3-28.

With the exception of Stella Maris Roman Catholic Chapel and the Seaman's Church Institute, both of which are located to the north in Port Newark and principally cater to the employees of the port facilities, community resources and open space resources are not present within ½-mile of Port Elizabeth (Figure 3-28). The Mickey Walker Recreation Center is located a little more than ½-mile south of the port site at 800-860 Anna Street. About two miles southwest of the site is the City of Elizabeth Police Headquarters, located at One Police Plaza. The nearest fire department, Rescue 1, is located about three-quarters of a mile southwest at 470 Catherine Street; at this location, the Elizabeth Police Department also provides ambulance and emergency medical services. The nearest elementary school is the Benjamin Franklin School (438 students in grades K-5 in 2003), which is located over one mile south of the port site, at 248 Ripley Place. Trinitas Hospital is located approximately one-quarter mile to the southwest of the port site at 925 East Jersey Street. Elizabethport Little League Field, located over one mile to the south on Dowd Avenue (between Schiller Street and the Chemical Coast rail line) contains one baseball field.

Vehicular access to Port Elizabeth from the south is primarily from U.S. Routes 1&9 via North Avenue and McLester Street. Access from the north is via Corbin Street, which is an internal roadway linking Port Elizabeth with Port Newark. Estimates indicate that by 2005, 91 percent of all truck traffic operating on North Avenue, McLester Street, and Corbin Street will be port-related.



Legend	
	Terminal Boundary
	1/2 Mile Buffer

**Figure 3-28: Port Elizabeth Marine Terminal Community, Recreational/Open Space, and Historic Resources**

Freight rail facilities serving Port Elizabeth include ExpressRail, E-Port, E-Rail Yard, Portside, and the Chemical Coast Line. Freight facilities serving Port Newark, immediately north of the site, include the Doremus Avenue Auto Terminals, and the Port Newark Container Terminal Interim Intermodal Yard.

Port Elizabeth is located in the New York-New Jersey Metropolitan Region, which is designated by the USEPA as a non-attainment area for ozone and PM<sub>2.5</sub>, and a maintenance area for CO. The area is designated as being in attainment for all of the other pollutants.

The latest ambient air quality data was collected in 2004 by the NJDEP at monitoring stations located at 7 Broad Street in Elizabeth, Veterans Park on Newark Bay in Bayonne, and 355 Newark Avenue in Jersey City. The data showed CO and PM<sub>10</sub> levels that comply with the NAAQS. However, monitored annual levels of PM<sub>2.5</sub> near Interchange 13 of the New Jersey Turnpike in Elizabeth are above the NAAQS. Monitored 24-hour PM<sub>2.5</sub> levels collected at this monitor in Elizabeth are within the NAAQS.

The principal sources of noise within and immediately surrounding Port Elizabeth are activities associated with the port, as well as motor vehicles and trucks primarily traveling on North Avenue, McLester Street, and Corbin Street. With the exception of the Stella Maris Chapel (170 Corbin Street) (Figure 3-28), no noise-sensitive land uses are located within 1,500 feet of Port Elizabeth. The nearest residences are located approximately three-quarters of a mile south of Port Elizabeth, along Schiller Street.

Similar to Port Newark, the site is an operating port located within a highly developed and urbanized area. The existing upland areas of Port Elizabeth are almost entirely developed with buildings, roadways, parking lots, and other port-related facilities. The ecological communities observed during a site visit (September/October 2004) included very small patches/strips of Urban Vacant Lot and Mowed Roadside/Pathway. The upland areas include a much wider variety of habitats, such as emergent marsh, urban vacant lot, mowed roadside/pathways, successional old field (on the IKEA site), tidal creek, salt shrub, high and low salt marsh, intertidal mudflat, and successional southern hardwood communities (on the Allied Signal Property).

Common species of birds were observed, including rock doves and dark-eyed juncos. No endangered, threatened, or special concern species listed in either New Jersey or New York were seen during a field visit.

State and Federally protected species include the four turtles and shortnose sturgeon identified in Table 3-4. The State endangered peregrine falcon (*Falco peregrinus*) has occurred at Port Elizabeth and foraging habitat for colonial waterbirds, black-crowned night herons, and yellow-crowned night herons, both threatened species in New Jersey, have been documented on-site (NJDEP 2004). The checkered white butterfly (*Pontia protodice*), savannah sparrow (*Passerculus sandwichensis*), and upland sandpiper (*Bartramia longicauda*) are threatened or endangered species that have been documented within one-quarter mile of the site. No federally protected species were identified on or adjacent to the site. However, an occasional transient bald eagle (*Haliaeetus leucocephalus*) is known to use the area (USFWS 2004b). EFH species are identified in Table 3-5. The list of federally managed species and their EFH are updated as additional information about a particular species' life history or population status changes. At such time as any project is proposed, the lead agency should review the status of EFH and the federally and state managed species to obtain the current designations.

NJDEP wetland maps (Elizabeth SE, No. 52-4) show patches of freshwater wetlands in the western third of the site (Figure 3-29). However, no freshwater wetlands were observed during a site visit. No freshwater wetlands are shown on the NWI map at Port Elizabeth (NWI, Elizabeth, NJ Southeast Quad) (Figure 3-30).

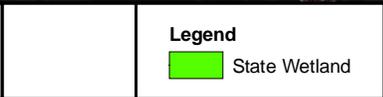
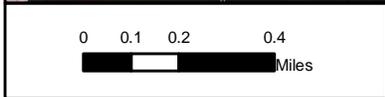


Figure 3-29:  
State Wetlands Map  
Port Elizabeth Marine Terminal

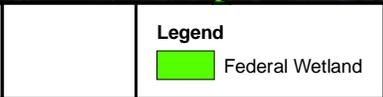
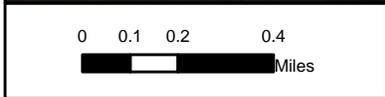


Figure 3-30:  
Federal Wetlands Map  
Port Elizabeth Marine Terminal

No tidal wetlands are mapped at Port Elizabeth. The IKEA expansion area west of the Port contains federal- and state-mapped emergent wetlands (NWI) and state-mapped open water wetlands. A trench/drainage ditch starting in the southwest corner of the IKEA area, which extends northeast along the western site boundary, has been mapped by the USFWS as subtidal and tidal wetlands. The area known as Allied Signal (south of Port Elizabeth) includes a mix of tidal creeks, shallow emergent marsh, salt shrub, and low salt marsh.

The existing port shoreline is hardened by extensive bulkheads. The shoreline of the Allied Signal site contains marine intertidal mudflats, which become littoral and sublittoral zones as the water deepens offshore.

According to a NOAA navigation chart (No. 12333) for this area, maintained shipping channels are located to the south (South Elizabeth Channel), east (Elizabeth Pierhead Channel), and north (Elizabeth Channel) with water depths ranging from 25 feet to 40 feet.

The majority of the existing Port Elizabeth Marine Terminal is in an area of minimal flooding (Zone C) (FEMA, 345523 0005E). The portions of the terminal adjacent to the Elizabeth Channel and open water are mapped as Zone B (areas that fall between the limits of the 100-year flood and 500-year flood). There are also small portions of the terminal at the northwest and southwest boundaries that are mapped within this category. The channel that lies along the western boundary of the site, Elizabeth Channel, and the remaining open water areas fall within the 100 year flood plain (Zone A5). The BFE for Zone A5 areas on this Port facility is 9 feet.

NJDEP has classified the water adjacent to Port Newark as SE3 waters. SE3 waters are saline estuarine surface water suitable for maintenance and migration of fish populations, migration of diadromous fish, maintenance of wildlife, as well as secondary recreation. Data collected in Newark Bay in 1998-1999 indicate the New Jersey water quality standards had been met (USACE-NYD, 1999).

Information related to hazardous materials in the vicinity of Port Elizabeth was obtained through a search of hazardous materials records (Table 3-22). Table 3-23 summarizes the search results for Port Newark/Port Elizabeth. Sites involving significant storage, use, disposal or release or hazardous materials involving the port facility or adjacent facilities are summarized in Table 3-23 (see Section 3.D, Port Newark).

South of Port Elizabeth, Allied Signal operated a chemical manufacturing facility from 1956 to 1999. Soil and groundwater contamination have resulted from past manufacturing activities at that site. In addition, as much as 3,000,000 cubic yards of dredged material were placed on the Allied Signal site during a 30-year period, one-third, of which originated from Newark Bay and the remaining two-thirds from unknown sources.

As a result, nine Areas of Concern (AOC) have been identified on the Allied Signal property; at least three of the AOCs appear to be located on the portion of the site that may be acquired for future port use. These AOCs include an electrical substation, the stormwater drainage ditches that run through the undeveloped areas, and the fill material located throughout the site. The contaminants of concern associated with these areas include polynuclear aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and heavy metals in site soils/fill material; low levels of volatile organic compounds (VOCs), heavy metals, and gross alpha and beta radionuclides in groundwater; and VOCs in the ditch sediments.

A former landfill with PCB contamination is located where the IKEA furniture store is sited, adjacent to Port Elizabeth. The landfill was capped and a groundwater remediation system was installed. The IKEA site, which was formerly part of the Port, is considered an adjoining source of contamination.

A total of 61 State hazardous waste sites were reported in the one-mile search area (Table 3-23). The presence of a significant number of hazardous waste sites and other sources of contamination, such as spills and leaking tanks, in the heavily industrialized search area will continue to act as a source for off-site groundwater contamination.

The majority of the buildings located at Port Elizabeth were constructed after World War II and before 1980. Therefore, due to the age of the structures, it is likely that many of the buildings contain ACM and LBP. An ACM survey was previously conducted by the Port Authority and any friable ACM located on-site has been abated. As of 1999, LBP surveys have not been conducted at site facilities.

## **F. PORT JERSEY GLOBAL MARINE TERMINAL, JERSEY CITY, NEW JERSEY**

Port Jersey Industrial and Marine Center (Port Jersey) comprises the Auto Marine Terminal and the Global Marine Terminal. Global Marine Terminal, a 100-acre facility, is a privately operated container facility that occupies the western end of the Port Jersey peninsula. The eastern end of the Port Jersey peninsula, as well as 130 acres of the Greenville Peninsula is occupied by Northeastern Auto Marine Terminal (NEAT) and BMW Port Jersey Vehicle Preparation Center. These facilities process automobile imports and exports. Port Jersey is surrounded by Upper New York Bay on the north, east, and south, and Routes 440 and 185 on the west (Figure 3-31).

Land uses surrounding Port Jersey are primarily transportation facilities and industrial sites (Figure 3-32). Less than ½-mile north of the port site and separated by a small strip of Newark Bay is Port Liberte, a residential community of luxury townhouses and a yacht club; these facilities, which were built in the 1980s, are sited on the end of Caven Point Peninsula. Commercial and retail uses are located about ½-mile west of Port Jersey in the mixed-use Greenville neighborhood of Jersey City, and about ¼-mile west in the northern portion of Bayonne. The New Jersey Turnpike Hudson County Extension and Route 440 serve as physical and visual buffers between these neighborhoods and Port Jersey.

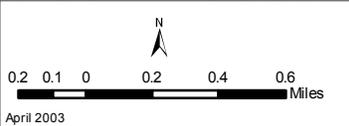
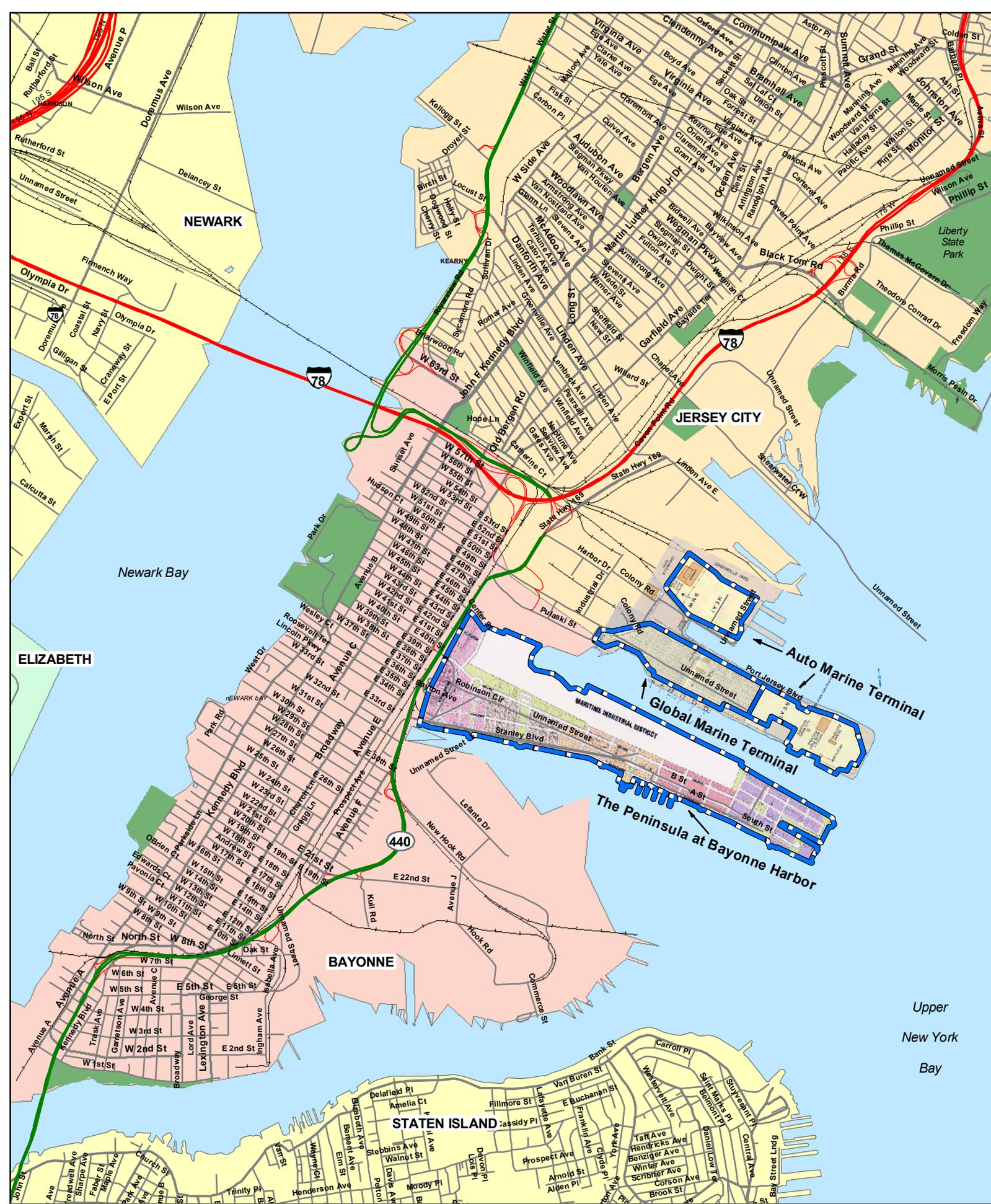
The western edge of Port Jersey, parallel to Route 440, is zoned Port Industrial, while most of the northern portion of the Port Jersey Peninsula is located in the Greenville Industrial Plan Area. The southern portion of the Port Jersey Peninsula is located within a Light Industrial District-B (IL-B). The nearest zone that permits residential uses is the Transportation Development District (TTD), located along Avenue E in Bayonne (Figure 3-33).

Approximately 9,200 people live within ½-mile of Port Jersey, in Jersey City and Bayonne, of which, nearly 70 percent are non-Hispanic White, 15 percent are Hispanic Latino, nearly 10 percent are African-American, nearly 6 percent are Asian, less than 1 percent are American-Indian or Alaskan Native, and 1 percent are Native Hawaiian or other Pacific Islander (Table 3-27). The 1999 median income ranged from approximately \$42,000 in the applicable Bayonne census tracts to approximately \$80,000 in Jersey City (Table 3-28). Approximately 10 percent of total households and 11 percent of individuals lived below the poverty level. Unemployed persons totaled 327 or approximately 4 percent of the population 16 years of age and older.

Views from Port Jersey include Upper New York Bay, the Statue of Liberty, Brooklyn, Lower Manhattan, and the Verrazano-Narrows Bridge. A public observation deck located at the end of Port Jersey Boulevard provides the best views of these resources. Stacked storage containers tend to obstruct such views from other areas within Port Jersey.

Several community, open space, and cultural resources are located between ½-mile and a mile west of Port Jersey, in southern Jersey City and northern Bayonne. These resources are shown on Figure 3-34 and listed in Table 3-29.

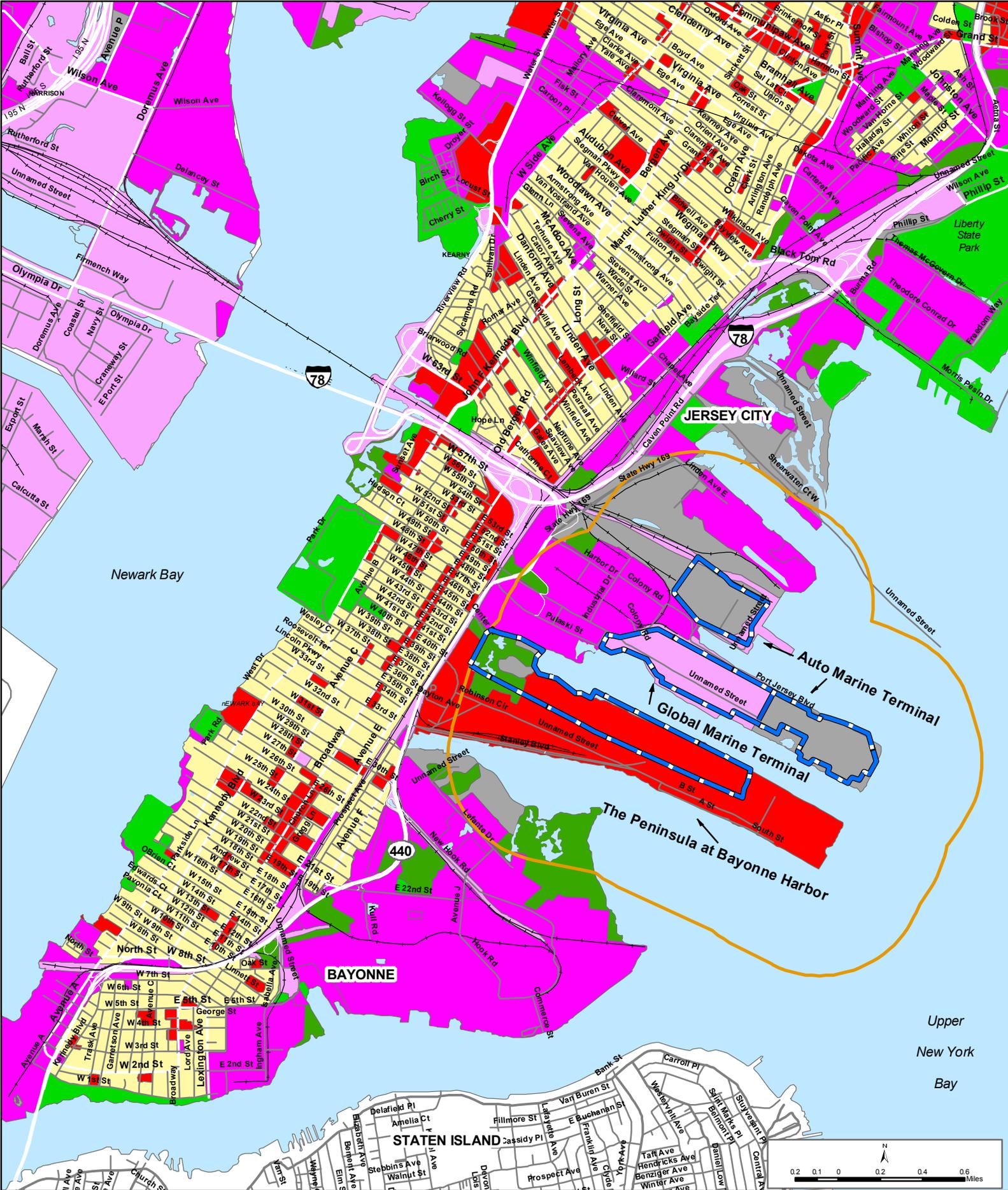
Historic resources located within and immediately adjacent to Port Jersey comprise mainly transportation-related infrastructure. Port Jersey is located in a portion of the Greenville Yard Historic District, which has received a NJHPO opinion of eligibility for listing on the National Register of Historic Places. Greenville Yard Piers, located just west of the Northeast Auto-Marine Terminal, has been determined eligible for listing on the National Register of Historic Places. A portion of the former bed of the Morris Canal, which is located between the New Jersey Turnpike Hudson County Extension and the Auto Marine Terminal, is listed on both the National and State Registers of Historic Places. The New Jersey Turnpike is in the process of receiving an opinion of eligibility for inclusion in the National Register of Historic Places. One prehistoric archaeological site, containing ceramic shards dating from 500-700 AD, is recorded just north of the Auto Marine Terminal.



**Legend**

 Terminal Boundary

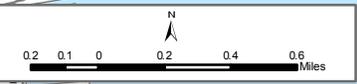
**Figure 3-31**  
**Location Map: Port Jersey**  
**and The Peninsula at Bayonne Harbor**



**Legend**

- Residential
- Commercial
- Industrial/Warehouse/Built-Up
- Transportation/Communication/Utilities
- Water/Stream/Wetlands/Lake
- Parks/Recreation/Open Space
- Agriculture
- Forest/Brushland
- Vacant Land
- Terminal Boundary
- 1/2 Mile Buffer

**Figure 3-32:  
Port Jersey Marine Terminal  
Land Use**





Source:

**Figure 3-33: Zoning Map – Port Jersey**

**TABLE 3-27: PORT JERSEY GLOBAL MARINE TERMINAL – RACIAL CHARACTERISTICS**

Census Tract*	Municipality	Total Population	Selected Race and Ethnicity (Non-Hispanic)										Hispanic/Latino	
			White		Black or African-American Alone		American-Indian, Alaskan Native Alone		Asian Alone		Native Hawaiian/ Other Pacific Islander Alone			
			Population	Percentage	Population	Percentage	Population	Percentage	Population	Percentage	Population	Percentage	Population	Percentage
58.02	Jersey City	1,037	518	50.0%	359	34.6%	1	0.1%	68	6.6%	0	0.0%	81	7.8%
101	Bayonne	5,377	3,798	70.6%	201	3.7%	4	0.1%	349	6.5%	6	0.1%	844	15.7%
103	Bayonne	2,814	1,941	69.0%	220	7.8%	3	0.1%	123	4.4%	1	0.0%	461	16.4%
<b>Study Area Total</b>		<b>9,228</b>	<b>6,257</b>	<b>67.8%</b>	<b>780</b>	<b>8.5%</b>	<b>8</b>	<b>0.1%</b>	<b>540</b>	<b>5.9%</b>	<b>7</b>	<b>0.1%</b>	<b>1,386</b>	<b>15.0%</b>

Source: United States Bureau of the Census. 2000 Census Summary File 1 and Summary File 3.

\* Located partially or entirely within ½-mile of site

\*\* Hispanic/Latino was counted as a separate racial category by the 2000 U.S. Census

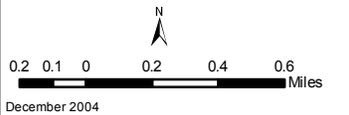
**TABLE 3-28: PORT JERSEY GLOBAL MARINE TERMINAL – SELECTED INCOME AND POVERTY CHARACTERISTICS**

Census Tract*	Municipality	Households				Individuals			
		Total Number of Households	1999 Median Household Income	Households Below the Poverty Level	% of Households Below the Poverty Level	Individuals Below the Poverty Level	% of Individuals Below the Poverty Level	Unemployed Persons 16 Years and Older	% Unemployed Persons 16 Years and Older
58.02	Jersey City	476	\$80,295	34	7.1%	115	9.8%	42	4.1%
101	Bayonne	2,319	\$42,264	248	10.7%	586	10.9%	203	4.6%
103	Bayonne	1,170	\$42,350	108	9.2%	216	7.7%	124	5.6%
<b>Study Area Total</b>		<b>3,965</b>	<b>N/A</b>	<b>390</b>	<b>9.8%</b>	<b>917</b>	<b>11.2%</b>	<b>327</b>	<b>4.3%</b>

Source: United States Bureau of the Census. 2000 Census Summary File 1 and Summary File 3.

\* Located partially or entirely within ½-mile of site

N/A - Not Available



Legend	
	Terminal Boundary
	1/2 Mile Buffer

**Figure 3-34: Port Jersey Global Marine Terminal: Community, Recreational/Open Space, and Historic Resources**

**TABLE 3-29: PORT JERSEY – COMMUNITY, RECREATIONAL/OPEN SPACE, AND HISTORIC RESOURCES**

Map Key**	Name*	Address
<b>Community Resources</b>		
1	E. L. Nolan Middle School #40	88 Gates Ave (Jersey City)
2	Jersey City Public Library -- Pearsall Branch	104 Pearsall Avenue (Jersey City)
3	Bayonne Police Department Headquarters	630 Avenue C (Bayonne)
4	Bayonne Fire Department Headquarters -- 57th Street Station: 1,250 GPM pumper, w/54' Articulating Boom, 100' Telescoping Ladder, 1,250 GPM Pumper (Reserve)	57th and Avenue B (Bayonne)
5	Jersey City Auxiliary ambulance facility	9 Linden Avenue East (Jersey City)
6	Bayonne Hospital/Medical Center – 278-bed facility offering comprehensive medical service, an emergency room, acute care and outpatient services	East 30th between Broadway and Avenue E
<b>Open Space/Parklands/Recreational Facilities</b>		
7	Russell Golding Park – (0.77 acres) contains basketball courts, a playground, wading pool and sitting area	Avenue E between E 49th and E 51 <sup>st</sup> (Bayonne)
8	Caven Point Recreation Center – (17.29 acres) contains baseball, softball, soccer and football fields, as well as concession stands	Caven Point Rd and Chapel Ave (Jersey City)
<b>Historic Resources</b>		
9	Greenville Yard Historic District	Greenville Yards between Interstate 78/New Jersey Turnpike Extension and the Hudson River
10	Greenville Yard Piers	Hudson River at Greenville Yards
11	Morris Canal	West of Port Jersey
12	New Jersey Turnpike	West of Port Jersey

Source: ESEC, 2004

\* Located within ½ mile of site

\*\* See Figure 3-34.

Port Jersey Boulevard provides direct vehicular access between Port Jersey and the New Jersey Turnpike Hudson County Extension/Route 78 (via interchange 14A). Additional access is provided via Pulaski Street, which links Port Jersey with northbound Route 440. Route 440, a major truck route, also links the New Jersey Turnpike Hudson County Extension/Route 78 (at interchange 14A) with Staten Island via the Bayonne Bridge. Estimates indicate that by 2005, 48 percent of all truck traffic along Port Jersey Boulevard and 13 percent of all truck traffic along Pulaski Street will be related to Port Jersey.

Port Jersey Global Marine Terminal and the Auto Marine Terminal are served by the Port Jersey Railroad, which provides connections to/from the national freight rail network, as well as the Greenville Yards Industrial Park. The New York Cross-Harbor Railroad transfers rail cars via barge between Port Jersey and Brooklyn.

Port Jersey is located in the New York-New Jersey Metropolitan Region, which is designated by the USEPA as a non-attainment area for ozone and PM<sub>2.5</sub>, and a maintenance area for CO. The area is designated as being in attainment for all of the other pollutants.

The latest ambient air quality data were collected in 2004 by the NJDEP at monitoring stations located at 2828 Kennedy Boulevard in Jersey City, Veterans Park on Newark Bay in Bayonne, and at 355 Newark Avenue in Jersey City. The data showed CO, PM<sub>2.5</sub>, and PM<sub>10</sub> levels that comply with the NAAQS.

Port-related activities, as well as motor vehicles and trucks traveling on Route 440, Port Jersey Boulevard, and Pulaski Street are the principal sources of noise within and immediately surrounding Port

Jersey. Land uses adjacent or proximate to these roadways are warehousing and manufacturing facilities, which are not considered noise sensitive. Residences closest (½-mile to the east) to Port Jersey are located in southern Jersey City in the vicinity of Gates Avenue and Catherine Court, as well as along Avenue E in northern Bayonne. However, Conrail's Bayonne Branch and the Hudson-Bergen Light Rail Transit System (HBLRTS) buffer these residential areas from Port Jersey and Route 440.

Few natural habitats or ecological communities were identified at Port Jersey during a site visit (September/October 2004). Small patches/strips of successional shrubland and mowed roadside/pathway are typical of the unpaved areas scattered throughout the site. The majority of the shore line is hardened (Estuarine Riprap/Artificial shore).

A small wetland restoration-site of about 5 acres has been constructed on the south shore. This wetland area contains a variety of communities, including intertidal mudflats, salt shrub, high and low salt marsh, as well as successional shrubland. The open water area surrounding Port Jersey includes littoral and sublittoral zones.

The northeast corner of this port site was developed as tern nesting habitat and includes an observation platform. Both the tern habitat and the constructed wetlands, created in the mid-1980s, were requirements of permits for development of the existing port. The tern habitat is covered in sand and mostly devoid of vegetation. Feral dogs and cats were observed in this area and animal footprints were observed throughout. Although most, if not all, of the records on the tern nesting habitat maintained by the Port Authority of New York and New Jersey are lost, it is believed that nesting has not occurred for years. This is likely the result of predators that roam freely through the area.

Also observed during a site visit were a variety of common birds including mallards, gadwall, American widgeon, herring and ring-billed gulls, golden-crowned kinglets, and song sparrows. The protected black-crowned night heron (*Nycticorax nycticorax*), peregrine falcon (*Falco peregrinus*), and savannah sparrow (*Passerculus sandwichensis*) were also identified on or near the site.

The black-crowned night heron (*Nycticorax nycticorax*), a New Jersey threatened species, once nested in the rookery on Shooter's Island (Kerlinger 2004). The peregrine falcon (*Falco peregrinus*), an endangered species in New Jersey and New York that nests and forages in the area, was observed, in flight, over Port Jersey.

State and Federally protected species include the four turtles and shortnose sturgeon identified in Table 3-4. Except for the occasional transient bald eagle, no threatened, endangered, or special concern species are located on or adjacent to the site (USFWS 2004b). Foraging habitats for colonial water birds and black-crowned night herons (threatened in New Jersey) are located in Port Jersey. USFWS has not listed any significant/critical habitats on-site or adjacent to the area. EFH species are identified in Table 3-5. The list of federally managed species and their EFH are updated as additional information about a particular species' life history or population status changes. At such time as any project is proposed, the lead agency should review the status of EFH and the federally and state managed species to obtain the current designations.

The only state or federal mapped wetlands (NJDEP Freshwater Wetlands Map, Jersey City SW, No. 53-3 and NWI Map, Jersey City Quadrangle) are those associated with past restoration projects (Figures 3-35 and 3-36). New Jersey classifies the Port Jersey area as a mix of palustrine, open water/unknown bottom, permanently flooded, diked/impounded and palustrine, emergent, persistent, saturated wetlands. (The state designation is inaccurate, as the area is, in fact, not impounded, as was discovered during a site visit.) NWI maps designate the Port Jersey area as an estuarine, intertidal, emergent, persistent, irregularly flooded wetland, combined with estuarine, intertidal, unconsolidated shore, regularly flooded wetland.

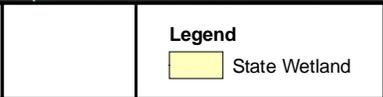
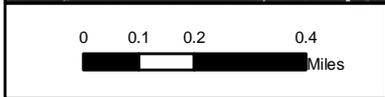


Figure 3-35:  
State Wetlands Map  
Port Jersey Marine Terminal

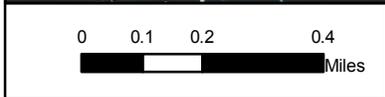


Figure 3-36:  
Federal Wetlands Map  
Port Jersey Global Marine Terminal

The high salt marsh habitat within the wetland restoration area includes *Spartina patens* (saltmeadow cordgrass), with sporadic individuals of *Atriplex patula* (orach), *Solidago sempervirens* (seaside goldenrod), and *Pluchea purpurascens* (saltmarsh fleabane) closer to water. The low salt marsh community along the edge of the Port Jersey Channel supports *Spartina alterniflora* (saltwater cordgrass) and *Salicornia sp* (glasswort).

The west end of the turning basin in the Port Jersey Channel and the west end of Greenville Channel both support low salt marsh communities. The NWI map classifies both the Port Jersey and Greenville Channels as estuarine, subtidal, excavated, unconsolidated bottom. Areas along the shoreline surrounding the port are classified as intermittently flooded, subtidal habitat by the NJDEP.

A NOAA navigation chart (No. 12334) for this area depicts maintained shipping channels along the south (Port Jersey Channel) and east sides of Port Jersey. The depth of the Port Jersey Channel ranges from 32 to 42 feet. The channel located at the east end of the site has mapped depths ranging from 19 to 25 feet. The channel along the north side of Port Jersey (Greenville Channel) is not maintained. Depths in this area vary from one foot on the far west end, to nine feet near the east end. The waters around the Northeast Auto-Marine Terminal's northern lot have been dredged and depths range from 17 to 23 feet.

NJDEP has classified the water adjacent to Port Jersey as SE2 waters. SE2 waters are saline estuarine surface water suitable for maintenance and migration of natural and established biota; migration of diadromous fish; maintenance of wildlife; and secondary recreation. Water quality data from the Harbor Survey (NYCDEP 2001-2003) sampling stations in the vicinity of Port Jersey indicate the NYSDEC water quality standards for both DO and pH were consistently met.

A large portion of the Port Jersey facility falls within Zone A5 (within the 100-year floodplain) with a BFE of 10 feet (FIRMs 340218004B and 3402230006B). The outer end of the port is mapped as pockets of Zone B (between the 100- and 500-year flood elevations) with no BEF established. One small area near the west end lies in Zone C (Areas of minimal flooding) as does the shoreward areas of the port.

Information relating to hazardous materials in the vicinity of Port Jersey was obtained through a search of hazardous materials records (Table 3-22). Table 3-30 summarizes the search results for Port Jersey. Sites involving significant storage, use, disposal or release or hazardous materials involving the port facility or adjacent facilities are summarized in Table 3-30.

Leakage of petroleum products from former underground storage tanks has caused contamination of soil and groundwater at Port Jersey. Existing underground storage tanks and on-going automotive processing and body repair activities involve the storage and use of hazardous materials and petroleum products. These activities have the potential to result in future releases of hazardous materials and petroleum products to soils and groundwater.

A total of 28 State hazardous waste sites are located within one mile of Port Jersey. The presence of a significant number of hazardous waste sites and other sources of contamination, such as spills and leaking tanks, will continue to act as sources for off-site groundwater contamination.

Due to the age of the structures on Port Jersey, ACM and LBP are likely to be present. However, information is not available regarding the actual existence of these substances in site structures.

**TABLE 3-30: PORT JERSEY GLOBAL MARINE TERMINAL – SEARCH AREA HAZARDOUS AND REGULATED MATERIALS DATABASE LISTINGS**

RCRA Facilities	Generator Size	# Violations/ Status	Spills/Leaking Tanks Sites	Product/ Amount	Cause/ Impact/ Status	Spills/Leaking Tanks Sites	Product/ Amount	Cause/ Impact/ Status
BMW of North America, 20 Colony Road	Small quantity	Multiple / latest in 1999	BMW of North America, 20 Colony Road	Petroleum/ not reported	Discovery during tank removal/ land impact/ on-going	<b>Neighboring Sites</b>		
Global Marine Terminal & Container Services, 302 Port Jersey Boulevard	Small quantity	None	Global Marine Terminal & Container Services, 302 Port Jersey Boulevard	Diesel/ not reported	Discovery during tank removal/ land impact/ Cleanup to be performed. Site has confirmed soil and groundwater contamination.	Unitor Ships Service Inc., 310 Port Jersey Boulevard	Tetrachloroethylene, arsenic/ not reported	Not reported
Northeast Auto Marine Terminal Inc., 403 Port Jersey Boulevard	Small quantity	3/latest in 1995	Northeast Auto Marine Terminal Inc., 403 Port Jersey Boulevard	Hydraulic oil/ 55-gallons	Spill/ not reported/ not reported	<b>Neighboring Sites</b>		
Petroleum/ Chemical Storage Facilities	Tanks/Products Stored	Status	Known Contaminated Sites	Status		Known Contaminated Sites	Status	
BMW of North America, 20 Colony Road	(1) UST/waste oil (2) USTs/gasoline	Removed Active	BMW of North America, 20 Colony Road	On-site sources of contamination exist from underground storage tanks. Status is reported as Active (reported as of 1998). Facility ID # NJL800348476.		Unitor Ships Service Inc., 310 Port Jersey Boulevard	On-site sources of contamination exist from underground storage tanks. Status is reported as Active (reported as of 2000). Facility ID # NJL800606014.	
Global Marine Terminal & Container Services, 302 Port Jersey Boulevard	(6) USTs/gasoline, diesel, fuel oil	Removed	Global Marine Terminal & Container Services, 302 Port Jersey Boulevard	On-site sources of contamination exist from underground storage tanks. Status is reported as Active (reported as of 1993). Facility ID # NJD053538682.				
Northeast Auto Marine Terminal Inc., 403 Port Jersey Boulevard	(2) USTs/gasoline, waste oil	Active						

Source: Environmental Data Resources, 2004.

\* Located within one mile of site

## **G. THE PENINSULA AT BAYONNE HARBOR, BAYONNE, NEW JERSEY**

The Peninsula at Bayonne Harbor (the Peninsula) was formerly known as the Military Ocean Terminal at Bayonne (MOTBY) and is sited on a 430-acre manmade peninsula located along Bayonne's northeastern waterfront. Bounded by Route 440 (previously Route 169) on the west, the Peninsula extends more than two miles into Upper New York Bay (Figure 3-37).

The Peninsula comprises a mix of warehousing, light industrial, office, and port-related facilities used for the storage and shipment of materials. The Peninsula is also home to a cruiseship facility. Reflective of its history, unoccupied housing units and recreational facilities formerly used by military personnel are also located on the site.

Extending westward for about ½-mile is the Route 440 corridor, which is primarily a warehousing and manufacturing area comprising several vacant and underutilized properties (Figure 3-38). Just west of Route 440 is Avenue E, which runs north/south and has a mixed-use character consisting of medium- to high-density residential development interspersed with industrial, heavy commercial and institutional uses. Bayonne's central business district and primary shopping and service destination is located one block west along Broadway. A recently constructed retail strip shopping center is located southeast of the Peninsula in Constable Hook.

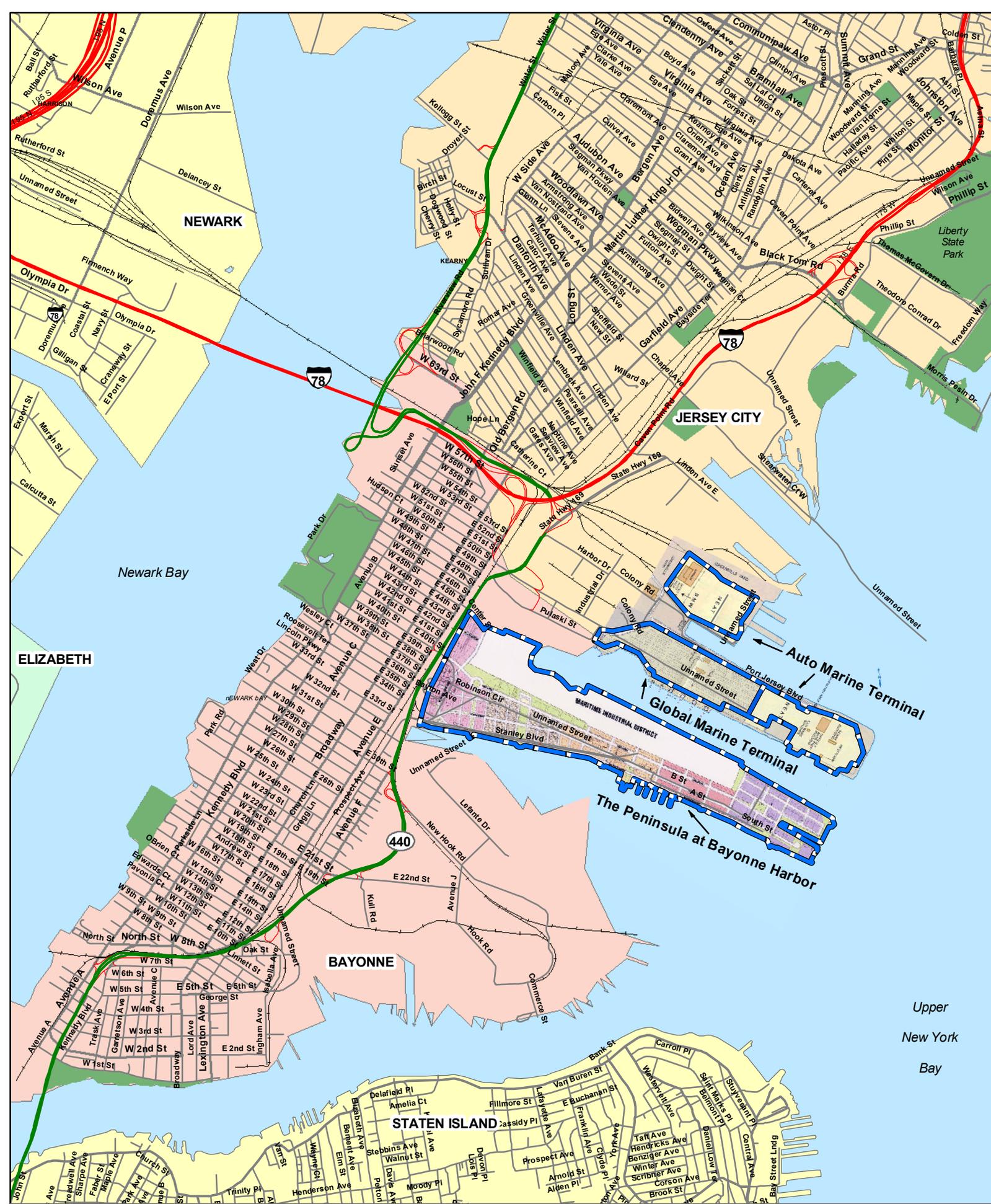
The Peninsula is located within the Bayonne Metropolitan Harbor District (BMHD), which is an area currently undergoing redevelopment. The closest zone that permits residential uses is the Transportation Development District (TDD) along Avenue E in Bayonne (Figure 3-39).

Nearly 24,000 people live within ½-mile of the Peninsula, of which approximately 70 percent are non-Hispanic White, 16 percent are Hispanic Latino, 4 percent are Asian, 4 percent are African-American, and 1 percent are Native Hawaiian/Other Pacific Islander (Table 3-31). The 1999 median income ranged from approximately \$34,000 to approximately \$51,000 (Table 3-32). Approximately 12 percent of total households and 9 percent of individuals lived below the poverty level. Unemployed persons totaled 802 or approximately 4 percent of the population 16 years of age and older.

The Peninsula provides waterfront views of Upper New York Bay, the Statue of Liberty, Brooklyn, and Lower Manhattan. The north side of the Peninsula has a strong industrial character supported by the views of the Global Marine Terminal and the Northeast Auto-Marine Terminal located across the Port Jersey Channel on the Port Jersey Peninsula. Views from the southern side of the Peninsula are mostly of vacant areas and the retail center located within Constable Hook.

Since the Peninsula consists of a landform made up entirely of fill dredged from the New York Harbor, it has no potential to possess significant archaeological remains. In addition, none of the buildings at the Peninsula contain architectural integrity sufficient to warrant them eligible for the National Register of Historic Places, either as individual properties or as part of a historic district.

Several community, open space, and historic resources are located within ½-mile of the Peninsula in northern and central Bayonne. These resources are listed in Table 3-33 and shown on Figure 3-40.



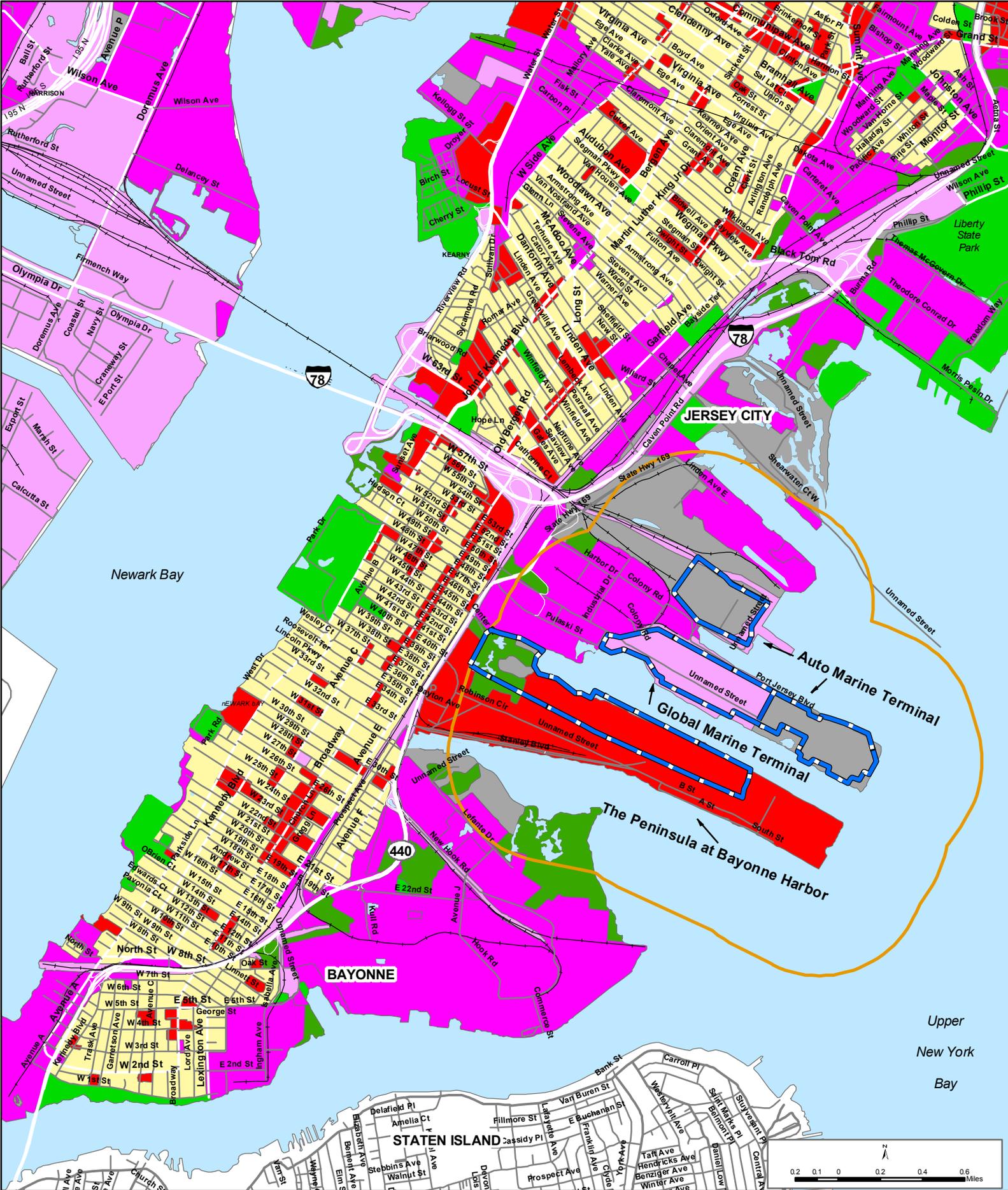
**Figure 3-37**  
**Location Map: Port Jersey**  
**and The Peninsula at Bayonne Harbor**

0.2 0.1 0 0.2 0.4 0.6 Miles

April 2003

**Legend**

Terminal Boundary



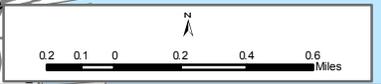
**Legend**

- Residential
- Commercial
- Industrial/Warehouse/Built-Up
- Transportation/Communication/Utilities
- Parks/Recreation/Open Space
- Vacant Land
- Agriculture
- Forest/Brushland
- Terminal Boundary
- 1/2 Mile Buffer



**Figure 3-38:**  
**The Peninsula at Bayonne Harbor**  
**Land Use**

January 2005





○ = 1/2 mile radius



Source: City of Bayonne Zoning Map, 2001

**Figure 3-39: Zoning Map – The Peninsula at Bayonne Harbor**

**TABLE 3-31: THE PENINSULA AT BAYONNE HARBOR – RACIAL CHARACTERISTICS**

Census Tract*	Municipality	Total Population	Selected Race and Ethnicity (Non-Hispanic)										Hispanic/Latino**	
			White		Black or African-American Alone		American-Indian, Alaskan Native Alone		Asian Alone		Native Hawaiian/ Other Pacific Islander Alone			
			Population	Percentage	Population	Percentage	Population	Percentage	Population	Percentage	Population	Percentage	Population	Percentage
101	Bayonne	5,377	3,798	70.6%	201	3.7%	4	0.1%	349	6.5%	6	0.1%	844	15.7%
103	Bayonne	2,814	1,941	69.0%	220	7.8%	3	0.1%	123	4.4%	1	0.0%	461	16.4%
104	Bayonne	3,706	2,790	75.3%	73	2.0%	3	0.1%	166	4.5%	0	0.0%	593	16.0%
105	Bayonne	5,270	3,794	72.0%	220	4.2%	5	0.1%	7	0.1%	317	6.0%	699	13.3%
106	Bayonne	6,457	4,558	70.6%	145	2.2%	2	0.0%	296	4.6%	1	0.0%	1,205	18.7%
<b>Study Area Total</b>		<b>23,624</b>	<b>16,881</b>	<b>71.5%</b>	<b>859</b>	<b>3.6%</b>	<b>17</b>	<b>0.1%</b>	<b>941</b>	<b>4.0%</b>	<b>325</b>	<b>1.4%</b>	<b>3,802</b>	<b>16.1%</b>

Source: United States Bureau of the Census. 2000 Census Summary File 1 and Summary File 3.

\* Located partially or entirely within ½-mile of site

\*\* Hispanic/Latino was counted as a separate racial category by the 2000 U.S. Census

**TABLE 3-32: THE PENINSULA AT BAYONNE HARBOR – SELECTED INCOME AND POVERTY CHARACTERISTICS**

Census Tract*	Municipality	Households				Individuals			
		Total Number of Households	1999 Median Household Income	Households Below the Poverty Level	% of Households Below the Poverty Level	Individuals Below the Poverty Level	% of Individuals Below the Poverty Level	Unemployed Persons 16 Years and Older	% Unemployed Persons 16 Years and Older
101	Bayonne	2,319	\$42,264	248	10.7%	586	10.9%	203	4.6%
103	Bayonne	1,170	\$42,350	108	9.2%	216	7.7%	124	5.6%
104	Bayonne	1,560	\$42,083	104	6.7%	214	5.8%	75	2.5%
105	Bayonne	2,262	\$51,050	197	8.7%	336	6.4%	181	4.2%
106	Bayonne	2,873	\$33,684	520	18.1%	741	11.5%	219	4.1%
<b>Study Area Total</b>		<b>10,184</b>	<b>N/A</b>	<b>1,177</b>	<b>11.6%</b>	<b>2,093</b>	<b>8.9%</b>	<b>802</b>	<b>4.2%</b>

Source: United States Bureau of the Census. 2000 Census Summary File 1 and Summary File 3.

\* Located partially or entirely within ½-mile of site

N/A - Not Available

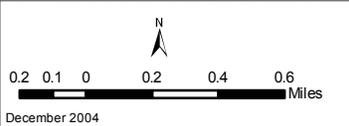
**TABLE 3-33: THE PENINSULA AT BAYONNE HARBOR – COMMUNITY, RECREATIONAL/OPEN SPACE, AND HISTORIC RESOURCES**

Map Key**	Name*	Address
<b>Community Facilities</b>		
1	Lincoln School No. 5 (K-8)	Prospect Avenue and East 30th Street
2	Horace Mann School No. 6 (K-8)	Broadway and West 38th Street
3	Yeshiva Gedolah of Bayonne (9-12)	735 Avenue C
4	Bayonne Main Public Library and Cultural Center: books, periodicals and newspapers, audio-visual materials, electronic media, computer and internet access and meeting room for use of community groups.	697 Avenue C
5	Bayonne Public Library Branch Number II:	1055 Avenue C
6	Bayonne Fire Museum: contains firefighting memorabilia, including the State of NJ's oldest hand draw hose carriage	10 West 47th Street
7	Bayonne Police Department MOTBY Station: temporary police substation	630 Avenue C
8	Bayonne Fire Department MOTBY Station: 2,000 GPM pumper, 1,000 GPM reserve pumper, 100-foot elevating platform, ambulance and reserve truck	630 Avenue C
9	Bayonne Fire Department 34th Street Station: 1,250 pumper with Foam System and Mobile Air Unit	37th Street between Broadway and Avenue C
10	Bayonne Hospital/Medical Center: 278-bed hospital offering comprehensive medical services, an emergency room, acute care and outpatient services	East 30th Street between Broadway and Avenue E
<b>Open Space/Parklands/Recreational Facilities</b>		
11	Russell Golding Park: 0.77-acre park with walking paths, benches, playground, basket ball courts and wading pool	Avenue E & 49th Street
12	Dr. Morris Park: 0.17-acre parking with sitting area	Broadway and West 47th Street
13	Joseph G. Skutnick Indoor Pool: Olympic-sized pool	30th Street & Prospect Avenue
14	40th Street Playground: 0.18-acre playground with sitting area	Avenue E & 40th Street
15	28th Street Park: 0.19-acre park with basketball courts, playground, and sitting area	Avenue F and East 28th Street
16	MOTBY Park: active and passive recreation facility currently being planned	still being planned
17	Port Jersey Park: passive recreational facility currently being planned	still being planned
18	Buffer Park: passive recreational facility currently being planned	along east side of Avenue F b/w East 29th to East 25th Street
19	Hudson River Waterfront Walkway: additional sections of walkway will be constructed as part of the redevelopment of MOTBY and Constable Hook	still being planned
20	Golf Course: currently being planned	still being planned
<b>Historic Resources</b>		
21	First Dutch Reformed Church	Avenue C and West 33rd
22	Bayonne Truck house #1	12 West 47th
23	PS #5	Avenue F and 22nd Street
24	Central Railroad of New Jersey, Main Line Historic District	(see map)

Source: ESEC, 2004

\* Located within ½ mile of site

\*\* See Figure 3-40.



**Legend**

- Terminal Boundary
- 1/2 Mile Buffer

**Figure 3-40: The Peninsula at Bayonne Harbor: Community, Recreational/Open Space, and Historic Resources**

Just north of the Peninsula, near Port Jersey, the Greenville Yard Historic District has received a NJHPO opinion of eligibility for listing on the National Register of Historic Places (Figure 3-40). The Greenville Yard Piers, located just west of the Northeast Auto-Marine, have been determined eligible for listing on the National Register. Additionally, the Greenville Yard Transfer Bridge System was recorded according to Historic American Engineering Record (HAER) standards. The First Dutch Reformed Church on Avenue C at West 33<sup>rd</sup> Street and the Bayonne Truck House # 1 (Hook and Ladder) at 12 West 47<sup>th</sup> Street near the intersection of Broadway are listed on the National and State Registers of Historic Places. Additionally, Public School # 5, located at Avenue F, and 22<sup>nd</sup> Street and the Central Railroad of New Jersey Main Line Historic District (railroad right-of-way) have received NJHPO opinions of eligibility for listing on the National Register of Historic Places.

Vehicular access to the Peninsula is via Route 440 to Port Terminal Boulevard. Route 440, a major truck route, connects the New Jersey Turnpike Hudson County Extension/Route 78 (at Interchange 14A) with Staten Island and points east via the Bayonne Bridge. Local access to the Peninsula is provided by Avenue E to East 40<sup>th</sup> Street and East 45<sup>th</sup> Street, via a bridge over Center Street.

A single freight track serves the Peninsula and is operated by CSX and Norfolk Southern. The track crosses Route 440 at grade, just north of the intersection of Route 440/Prospect Avenue.

The Peninsula at Bayonne Harbor (the Peninsula) is located in the New York-New Jersey Metropolitan Region, which is designated by the USEPA as a non-attainment area for ozone and PM<sub>2.5</sub>, and a maintenance area for CO. The area is designated as being in attainment for all of the other pollutants.

The latest ambient air quality data collected in 2004 by the NJDEP at monitoring stations located at 2828 Kennedy Boulevard in Jersey City, Veterans Park on Newark Bay in Bayonne, and at 355 Newark Avenue in Jersey City recorded CO, PM<sub>2.5</sub>, and PM<sub>10</sub> levels that comply with the NAAQS.

The principal sources of noise within and immediately surrounding the Peninsula include motor vehicles and trucks traveling on Route 440, as well as Conrail's Bayonne Branch and the HBLRTS (which are both located parallel to Route 440). Warehousing and manufacturing facilities are principally located adjacent or proximate to these roadways and rail services. However, residences are located along Avenue E (from roughly 32<sup>nd</sup> to 47<sup>th</sup> Streets) adjacent to the freight rail and light rail transit services, which provide a buffer to the Peninsula, as does Route 440.

Diverse habitats and ecological communities are located within the Peninsula. Although a significant portion of the Peninsula has been developed, acres of shallow emergent marsh and shrub swamp are located in the northwestern portion of the site. Also observed in the vicinity of the wetlands were areas of successional old field, successional shrubland, successional southern hardwoods and mowed roadside/pathway communities. Along the north shore of the site, at the western end of Port Jersey Channel, is a tidal wetland complex consisting of intertidal mudflats, low salt marsh and salt shrub communities. The remainder of the shore is riprap or bulkhead. The open water areas are littoral zone and sublittoral zone, which extend eastward from the shoreline.

A variety of common avian species was observed during a site visit, including herring and ring-billed gulls, yellow rumped and palm warblers, and American goldfinch. The protected osprey (*Pandion haliaetus*) and savannah sparrow (*Passerculus sandwichensis*) were identified on or near the site.

The Cooper's hawk (*Accipiter cooperii*), a New Jersey threatened species and a special concern species in New York, was also observed. The site provides good foraging habitat, as evidenced by the large numbers of prey bird species.

State and Federally protected species include the four turtles and shortnose sturgeon identified in Table 3-5. Except for the occasional bald eagle, endangered or special concern species are not located on or adjacent to the site. The NJDEP has identified foraging habitats for colonial water birds and black-

crowned night herons (threatened in New Jersey) on-site. USFWS does not list any significant/critical habitats on or adjacent to the site. EFH species are identified in Table 3-5. The list of federally managed species and their EFH are updated as additional information about a particular species' life history or population status changes. At such time as any project is proposed, the lead agency should review the status of EFH and the federally and state managed species to obtain the current designations.

Two state mapped areas of palustrine, emergent, freshwater wetlands (Jersey City SW, No. 53-3) are located in the northwest corner of the Peninsula (Figure 3-41). The NWI Map (Jersey City Quadrangle) indicates an extensive complex of freshwater wetlands in the same area (Figure 3-42). These wetlands were delineated in the late summer/early fall of 2004 and the report documenting the findings contains additional details related to the type and extent of wetlands.

The northern shoreline of the Peninsula is depicted on the NWI map as estuarine, intertidal, emergent, irregularly flooded, marsh. The shoreline to the east of this point can be classified as almost entirely bulkheaded or made of riprap. The Port Jersey Channel is classified as E1UBLx wetland by the USFWS.

A NOAA navigation chart (No. 12334) for the area indicates depths quickly exceeding 30 feet immediately off the manmade shoreline of the Port Jersey Channel. The open water area to the west of the turning basin ranges in depth from one to 18 feet. At the east end of the Peninsula is a maintained channel greater than 30 feet in depth.

NJDEP has classified the water adjacent to the Peninsula as SE2 waters. SE2 waters are saline estuarine surface water suitable for maintenance and migration of natural and established biota; migration of diadromous fish; maintenance of wildlife; and secondary recreation. Water quality data from the Harbor Survey (NYCDEP 2001-2003) sampling stations in the vicinity of the Peninsula show the NYSDEC water quality standards for both DO and pH were consistently met.

The east and west ends of the Peninsula at Bayonne fall within Zone B (between the 100- and 500-year flood elevations); no BFE established (FIRM 340218004B). The central section of the peninsula is mapped as Zone A5 (within the 100-year floodplain) with a BFE of 10 feet. The water surrounding the peninsula is also classified as Zone A5 with a ten foot BFE.

Information related to hazardous materials in the vicinity of the Peninsula was obtained through a search of hazardous materials records (Table 3-22). Listings involving significant storage, use, disposal or release or hazardous materials involving the port facility directly or adjacent facilities are summarized in Table 3-34.

The Military Ocean Terminal facility was closed in 1999 under the Base Realignment and Closure Act (BRCA). The City of Bayonne uses portions of the site and is redeveloping the property. Past disposal practices and placement of fill have resulted in soil and groundwater contamination. The Peninsula is currently undergoing remediation under NJDEP oversight.

Several Areas of Concern (AOCs) have been identified on-site and are currently being remediated (Table 3-35). Contaminated soil has been removed and the final engineering controls (e.g., asphalt-paved cap and/or soil cap) have been completed in most areas. The remedial action work plan for these AOCs includes removal of source area "hot spots," capping of disposal areas, and monitoring of site-wide groundwater, while allowing for natural attenuation of contaminated groundwater to occur. The construction debris landfill is being capped with clean soil. Other areas are being capped with asphalt or fenced to prevent access. "Hot spots" of contaminated soil and groundwater have been removed to the extent practicable. Residual contamination in these areas is being capped and managed. All engineering and institutional controls are scheduled to be completed in 2005. Contaminated groundwater is being monitored and no significant migration of contamination off-site has been identified. When complete, a No Further Action (NFA) letter will be issued by NJDEP.

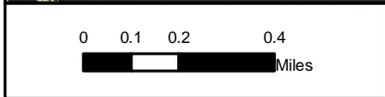


Figure 3-41:  
State Wetlands Map  
Peninsula at Bayone Marine Terminal

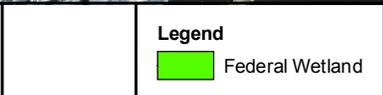
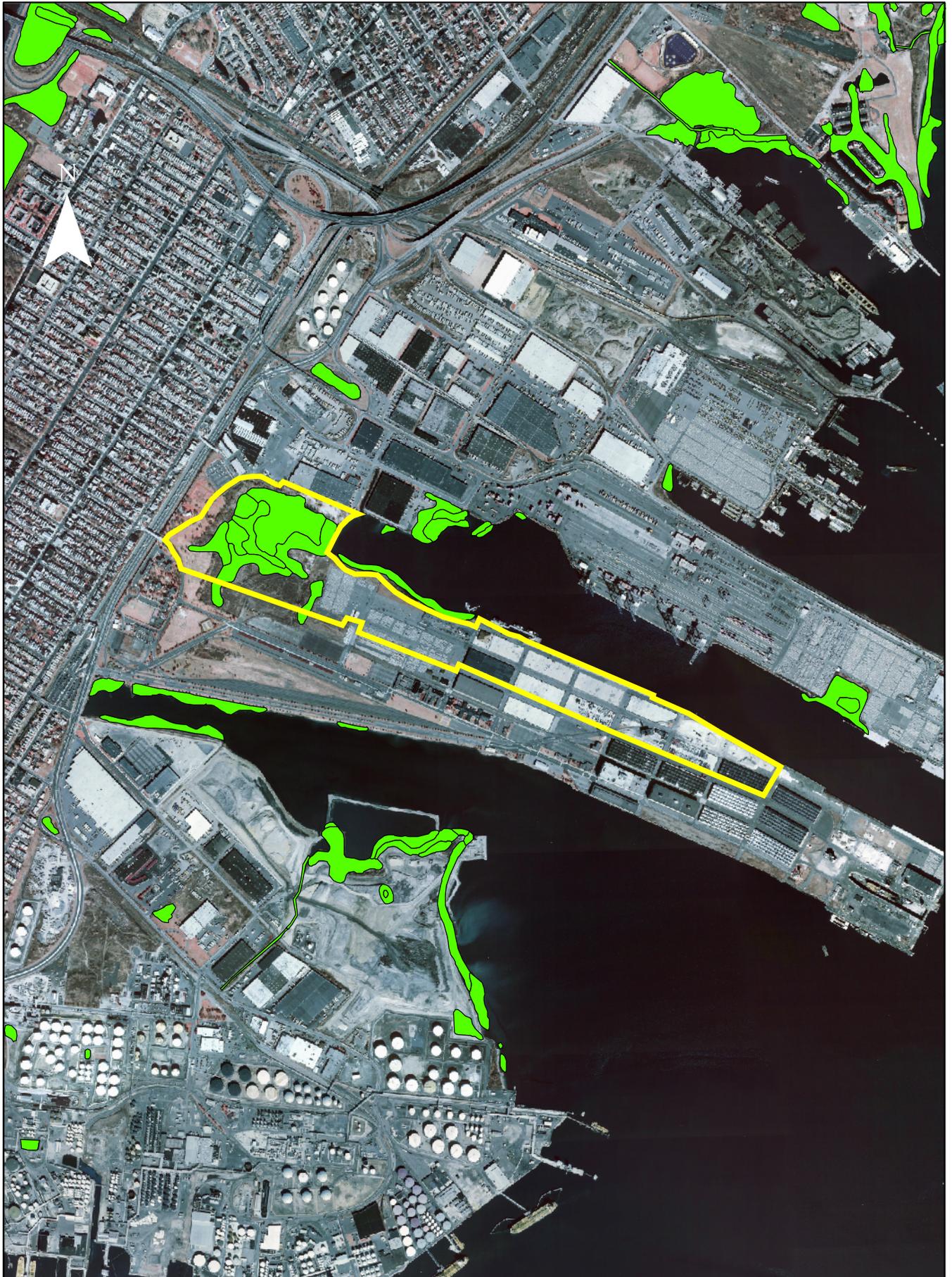


Figure 3-42:  
Federal Wetlands Map  
Peninsula at Bayone Marine Terminal

**TABLE 3-34: PENINSULA AT BAYONNE – SEARCH AREA HAZARDOUS AND REGULATED MATERIALS DATABASE LISTINGS**

<b>RCRA Facilities</b>	<b>Generator Size or RCRA Program</b>	<b># Violations/ Status</b>	<b>CERCLIS – NFRAP</b>	<b>Status</b>
MOTBY	CORRACTS	Contaminated groundwater identified, migration is under control. Stabilization measures implemented	MOTBY	PA late 1970s/early 1980s. RI 1989. No Further Remedial Action Planned at the Federal level. NJDEP to perform further oversight at the State level
MOTBY	TSD FACILITY/ Used oil spec marketer	27 violations	<b>Known Contaminated Sites</b>	<b>Status</b>
MOTBY	Large quantity	Multiple /latest in 1993	MOTBY	On-site sources of contamination exist. Active status (as of 1991). Facility ID # NJ0210022752
<b>Petroleum/ Chemical Storage Facilities</b>	<b>Tanks/Products Stored</b>	<b>Status</b>	US Military Terminal/ Constitution Avenue	On-site sources of contamination exist. Status is reported as Pending (as of 1997). Facility ID # NJL000056713
MOTBY	(39) USTs/fuel oil, diesel, gasoline, waste oil (11) USTs/ gasoline, fuel oil, diesel	Removed  Active		
<b>Spills/Leaking Tanks Sites</b>	<b>Product/ Amount</b>	<b>Cause/ Impact/ Status</b>		
MOTBY	Multiple minor spills and releases, many related to vessels	No major spills or releases reported in these databases		

Source: Environmental Data Resources, 2004.

\* Located within one mile of site

**TABLE 3-35: PENINSULA AT BAYONNE – AREAS OF CONCERN**

<b>AOC Name</b>	<b>Location</b>	<b>History</b>	<b>Remedial Action</b>	<b>Status</b>
Operating Unit (OU) 5 – Facility-wide Groundwater	Entire peninsula	Shallow groundwater impacted by historic activities and fill materials.	Two year groundwater monitoring program.	Groundwater monitoring completed. Classification Exception Area to be established.
OU 7 – Area 44C Boiler Building	Central portion of peninsula	Fuel oil leaked from underground tanks and pipelines servicing this building.	Excavation of contaminated soil, recovery of free phase product and groundwater.	Excavation of soil and recovery of product and groundwater completed in 2003. Some residual contamination remains.
OU 9/Northfill Area	36.5 acre area at the north-western end of peninsula	Landfill created from dredged fill in the late 1960s/early 1970s. Contaminant levels meet definition of historic fill in New Jersey.	Chain link fence and signage installation to prevent access to area.	Fence and signage to be installed late 2004/early 2005.
OU 9 – Landfill	26.3 acre area at the north-western end of peninsula	Construction debris and domestic landfill.	Soil cap, groundwater monitoring for 5 years.	Cap is under construction (late 2004) to be completed in 2005.
OU 11 – Defense Reutilization and Marketing Office	Northwestern end of peninsula	Soil impacted by historic operations.	Limited excavation of contaminated soil. Soil and asphalt caps.	Excavation completed. Caps are under construction (late 2004) to be completed in 2005.
OU 20 – Lots 94, 95 and 205	West-central portion of peninsula	6.3 acre fill area with debris. Elevated metals and PAHs.	Soil and asphalt caps.	Caps completed in Summer of 2004.

Source: *Environmental Data Resources, 2004.*

\* Located within one mile of site

A total of 43 State hazardous waste sites were reported in the one-mile search area around the Peninsula. The presence of a significant number of hazardous waste sites and other sources of contamination, such as spills and leaking tanks will continue to act as sources of groundwater contamination.

ACM and LBP have been removed and/or properly encapsulated for currently occupied buildings. However, ACM and LBP remain in the vacant buildings.