

SECTION 4

ANALYSIS, FINDINGS & RECOMMENDATIONS

I. OVERVIEW

The BOA process is designed to catalyze community-supported redevelopment by establishing a clear and actionable plan for neighborhood revitalization. The BOA team’s analysis of existing conditions across the study area, in consultation with the Steering Committee and project partners, has resulted in a consensus-based vision that prioritizes community health and well-being, the creation of affordable housing, protection of neighborhood character, and reconnection to the area’s historic livelihood as a commercial center and working waterfront.

To advance this vision, what follows is a roadmap for redevelopment. Section 4 explores the potential to revitalize

brownfield sites in four subdistricts within the BOA area. It sets forth fine-grained goals for each subdistrict, addressing local conditions and community needs. These goals in turn guide redevelopment scenarios envisioned for six strategic sites, offering templates for new commercial and industrial spaces, mixed-use developments, and community facilities.

A “roadmap for redevelopment” offers ideas and inspiration for public and private partners who are essential to achieving community goals.

While each scenario is tailored to its specific location and site requirements, these detailed physical, programmatic,

and financial strategies are applicable to brownfield and underutilized properties across the study area. In reimagining these sites as neighborhood assets, the scenarios presented here offer tools and insights for public agencies and private-sector partners whose investments are needed to realize the BOA area’s community vision.

Strategic site scenarios are followed by recommendations that provide actionable strategies that can be carried forward at site, subdistrict, and area-wide scales. Altogether, this roadmap provides a sustainable path to create a vital live-work neighborhood, expand access to quality jobs, and address environmental contamination within the BOA community—bringing together new infrastructure, resources, and inspiration for the people of Port Richmond and Mariners Harbor.



Fig. 57: The BOA Subdistricts, Clockwise from Top Left: Mixed-Use Corridor; Working Waterfront; Creative Industry; Affordable Neighborhood

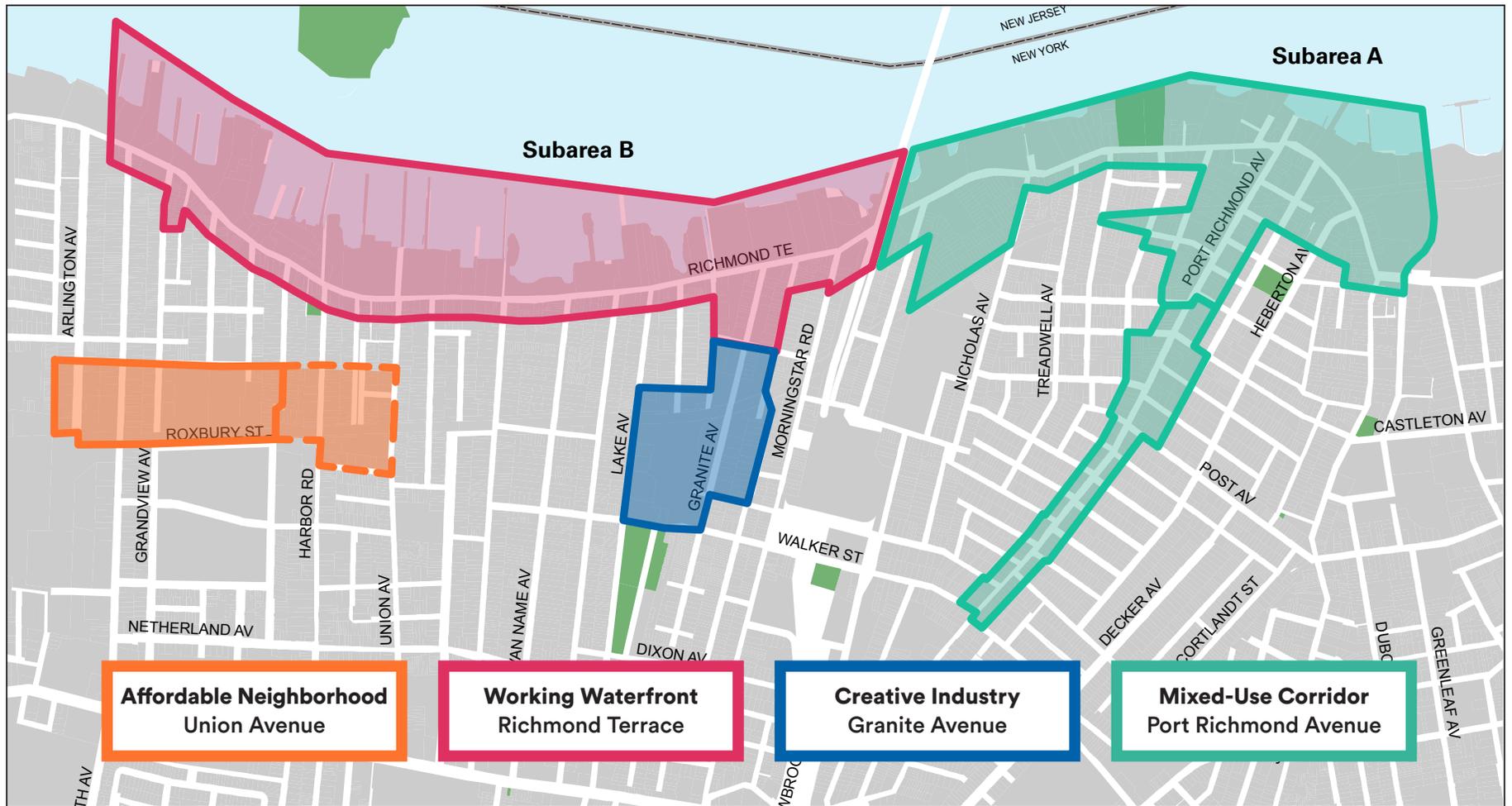


Fig. 58: Port Richmond-Mariners Harbor BOA Subdistrict Framework

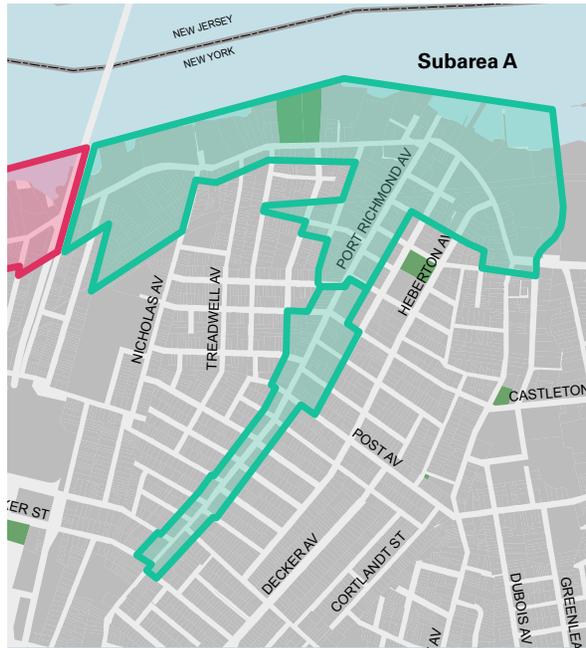
II. SUBDISTRICT FRAMEWORK

To identify the most appropriate and effective revitalization strategies for the BOA area’s diverse neighborhoods, the study area has been divided into four subdistricts that are described below. The project team sought to use this subdistrict framework to assess opportunities and

challenges across different portions of the study area, and examine local market and physical contexts to ensure that strategic recommendations for future development align with local conditions.

The boundaries of the four subdistricts were drawn with input from the Steering Committee and informed by the initial submarket analysis detailed in Section 3.

Each subdistrict reflects a consistent set of zoning and land use patterns, infrastructure, and economic conditions. Analysis of these conditions has informed the development of goals tailored to advance community-supported redevelopment actions for each subdistrict. Since this framework is focused on development opportunities, Mariners Marsh and Arlington Marsh have not been included in the subdistrict discussion.



SUBDISTRICT KEYMAP

**MIXED-USE CORRIDOR:
PORT RICHMOND AVENUE**

Existing Conditions: This subdistrict encompasses the commercial core of Port Richmond Avenue and extends west along the Richmond Terrace waterfront to the Bayonne Bridge. On Port Richmond Avenue, the subdistrict begins at the southern edge of the study area, at Walker Street, and includes portions of the avenue zoned R3-2 and C8-1 as well as the larger C4-2 district that comprises the heart of the walkable commercial corridor. This grouping consists principally of mixed-use buildings, with occasional single-family residential homes, automotive uses, and commercial structures clustered at the southern end of the subdistrict. Given the



Fig. 59: View Toward the Kill Van Kull at Port Richmond Avenue and Richmond Terrace

largely intact fabric of street-level retail in the heart of the corridor—extending from Post Avenue north to Richmond Terrace—the district possesses an economic and urban cohesion that remains from its era as a regional shopping destination. Today the area’s existing business clusters of ethnic restaurants and home furnishing retailers reinforce its commercial identity.

At the northern end of Port Richmond Avenue, the subdistrict includes properties along Richmond Terrace from the eastern boundary of the study area, at Bodine Creek, and extends west to the Bayonne Bridge. These properties are almost entirely zoned for low- and medium-intensity manufacturing uses (M1-1 and M2-1), with exceptions for certain inland properties on

the south side of Richmond Terrace that are zoned for low- and medium-density residential uses (typically R4 and R3A). These uses include a cluster of water-dependent maritime businesses including Reinauer Transportation and Moran Towing at the eastern edge of the subdistrict. At Port Richmond Avenue’s northern terminus on the Kill Van Kull are several adjoining sites of community interest including a series of tax lots owned by Flag Container Services, which operates a construction and demolition waste transfer station on the waterfront. Extending west to the Bayonne Bridge, the subdistrict contains numerous waterfront sites with non-water-dependent uses, including storage facilities, parking, autobody shops, and building supply yards.

Goals: The community vision for this subdistrict seeks to **connect commercial activity along Port Richmond Avenue to create a more coherent, walkable district.** This includes the redevelopment of vacant and underutilized parcels along the avenue, particularly near the northern end where it approaches Richmond Terrace and the Kill Van Kull waterfront. This critical gateway to the commercial corridor and the BOA area to the west should be strengthened to create more continuous retail frontage extending to the waterfront and to nearby bus and future ferry connections. The community also wishes to see **the creation of mixed office, retail, and affordable residential uses** that will strengthen the area as a vibrant, live-work neighborhood and provide more residential density along the commercial corridor.

A third goal for the subdistrict is **improved waterfront access and public transit connections, while reserving deep-water access points for maritime uses.** Supporting existing maritime infrastructure is critical to enhancing the area’s economic vibrancy, but waterfront industrial use must be balanced with greater public access to the Kill Van Kull and the creation of much-needed community open space. To facilitate a new, mixed-use neighborhood anchor on the waterfront, the community also recommends rezoning for higher-density, mixed-use development at the northern end of Port Richmond Avenue. This proposed rezoning would support subdistrict goals and permit the creation of new housing and community amenities at one of the most historic and significant locations in the BOA study area.

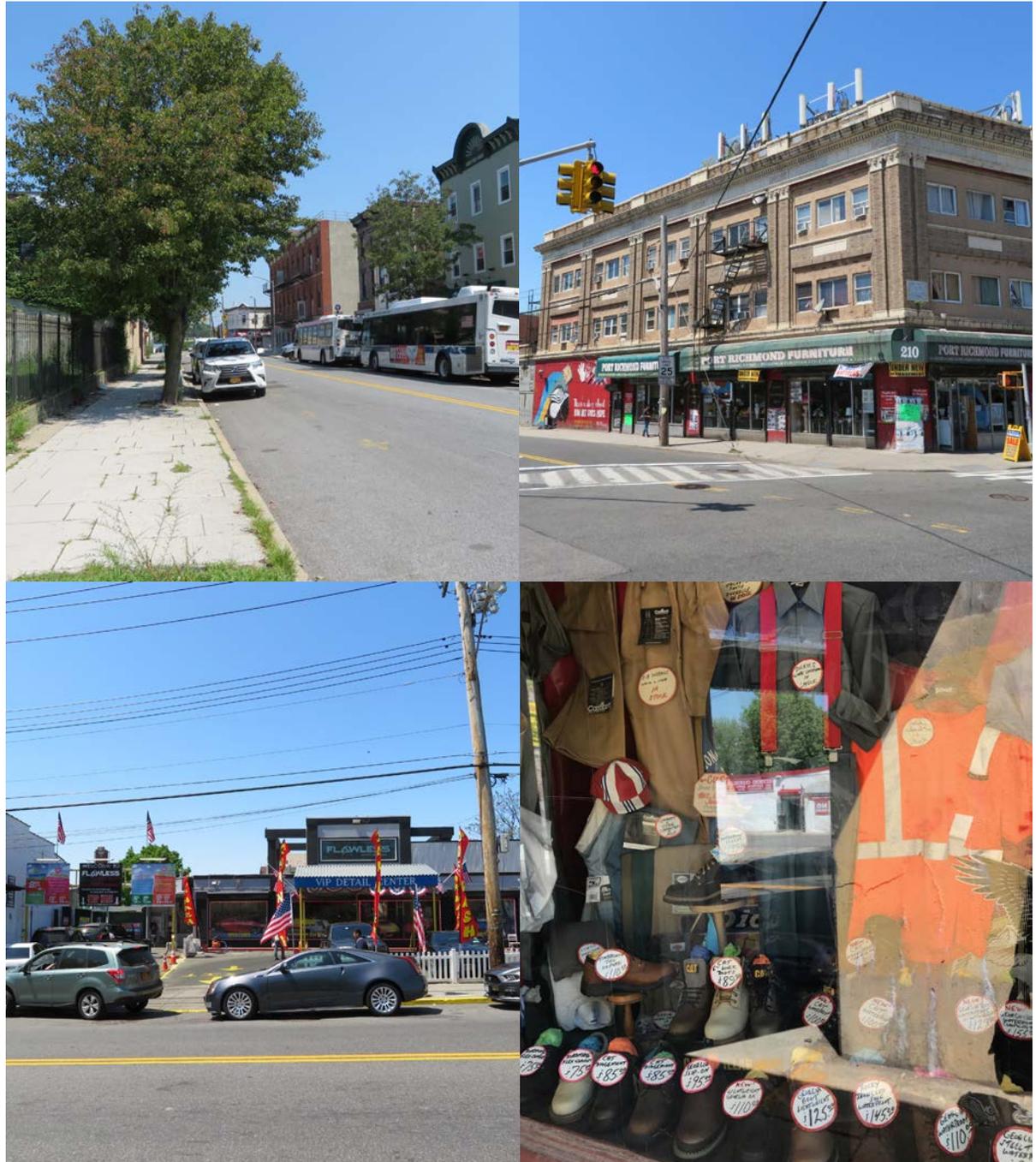
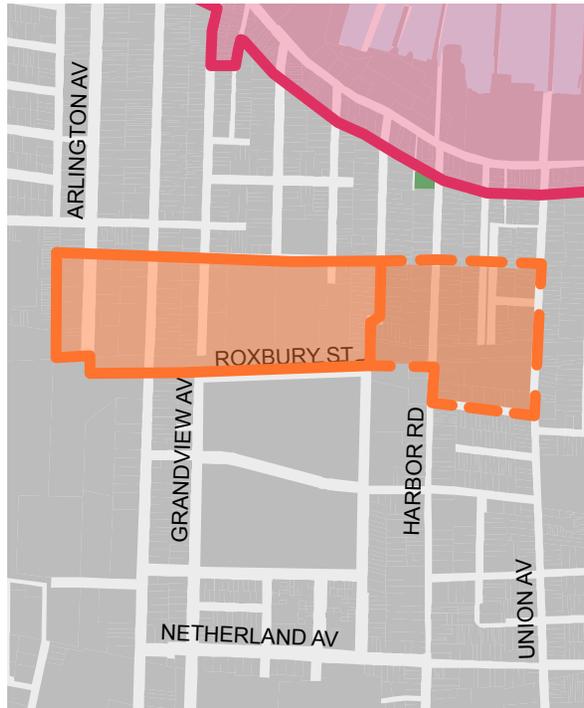


Fig. 60: Clockwise from Top Left: Bus Terminal at Port Richmond Avenue; Furniture Dealer at Castleton Avenue; Storefront Window Display; Automotive Use Within the Avenue’s C8-1 District



SUBDISTRICT KEYMAP

AFFORDABLE NEIGHBORHOOD: UNION AVENUE

Existing Conditions: The Affordable Neighborhood subdistrict is centered around a medium-intensity manufacturing district (M2-1) bounded approximately by Arlington Avenue on the west, Lockman Avenue on the east, Davidson Street on the north, and Roxbury Street on the south. This district includes two large lots totaling 6.1 acres owned by 60 Davidson LLC, which abut the North Shore Railroad right-of-way, as well as smaller lots occupied by a variety of industrial uses including warehousing, distribution, welding, ironworking, and building suppliers.



Fig. 61: Davidson Street Industrial Site

The subdistrict extends east and south of the manufacturing zone to include an underutilized property of community interest bounded by Union Avenue, Harbor Road, Leyden Avenue, and the North Shore Railroad right-of-way. This site, composed of several adjoining tax lots, is largely vacant but includes several single-story storage facilities on its perimeter. The site is zoned for low-density residential development (R3A), and, like the subdistrict's manufacturing zone, is located within a context of detached and semi-detached one- and two-family residences.

The subdistrict also includes cultural and educational facilities such as the Mariners

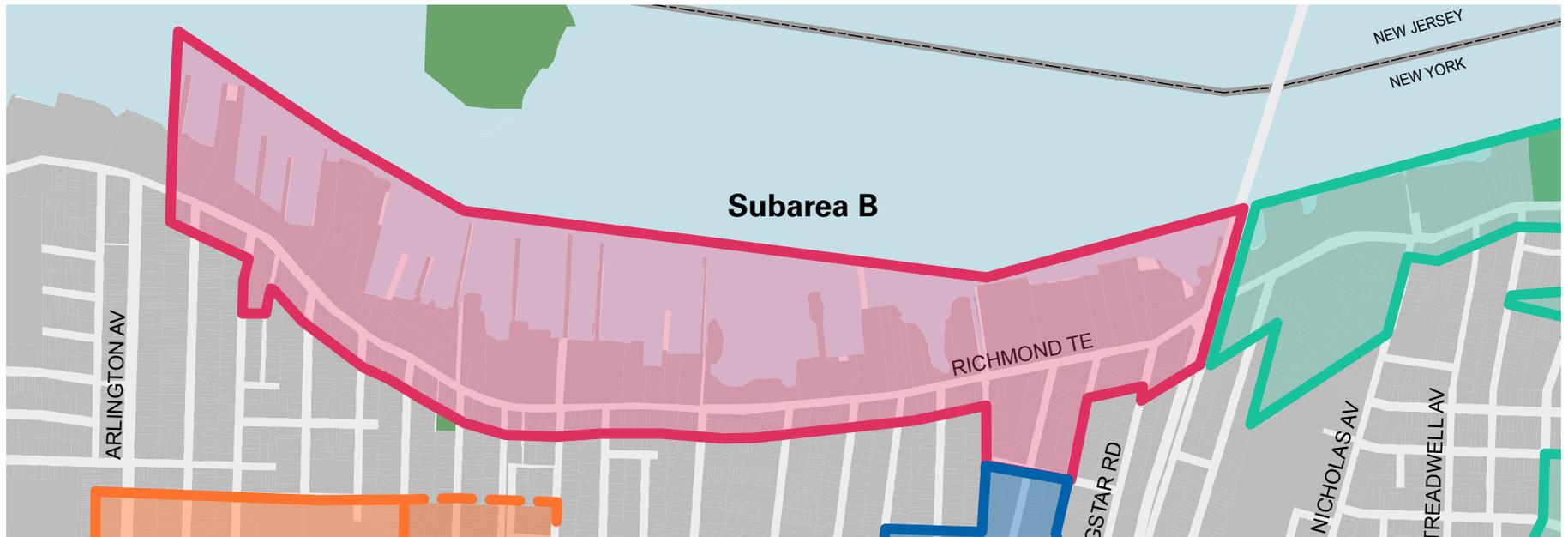
Harbor Library, a single-story branch of the New York Public Library opened in 2013 on South Avenue, and Public School 44, located on Union Avenue at Brabant Street. A large New York City Housing Authority complex lies to the south of the subdistrict's core manufacturing zone, between Roxbury Street and Continental Place.

Goals: Community goals for this subdistrict include the **creation of affordable housing and community facility uses, specifically a community health center.** Given its location within a largely residential neighborhood, the subdistrict offers potential to provide multifamily affordable housing that would offer greater options for both young families



and seniors within Mariners Harbor. A community health facility is also highly needed within this medically underserved area. To accompany additional residential density and community uses, additional goals include **parks, open space, and transit improvements that would provide key infrastructure and amenities** in this underserved area. To achieve these goals, the community recommends rezoning the Davidson Street industrial area to a mixed-use district. Such a district would allow for more productive use of currently vacant tax lots, and provide the setting for a more cohesive neighborhood fabric that includes diverse residents, businesses, and services.

Fig. 62: Clockwise from Top Left: Low-Density Housing on Leyden Avenue; Mariners Harbor Library; Vacant Storage Structure on Union Avenue; Building Supply on Arlington Avenue



SUBDISTRICT KEYMAP

WORKING WATERFRONT: RICHMOND TERRACE

Existing Conditions: The Working Waterfront subdistrict consists principally of a high-intensity manufacturing zone (M3-1) on the Kill Van Kull waterfront extending from approximately South Avenue on the west to the Bayonne Bridge on the east. This industrial waterfront contains key deep-water access points and some of the BOA area's most important maritime businesses, including Kirby Offshore Marine, McAllister Towing, May Ship Repair, and Great Lakes Dredge & Dock Company.

A number of non-water-dependent uses are also located in this subdistrict, including self-storage, plumbing and building trades, auto salvage, parking,

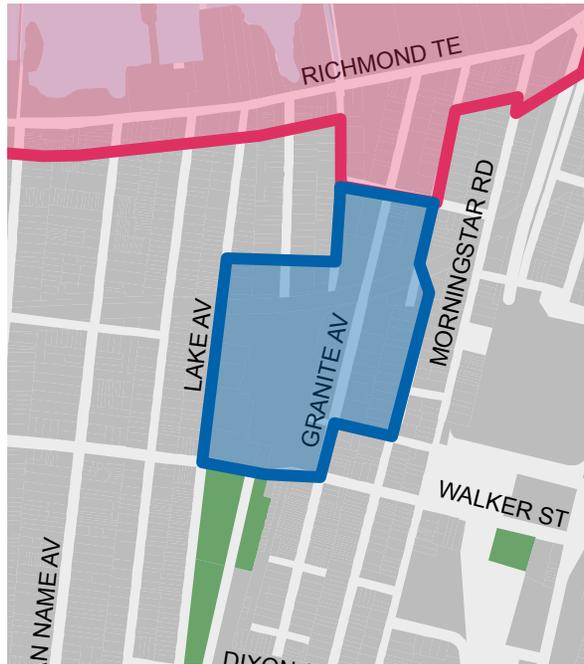
and vacant land. An area zoned for low-intensity manufacturing (M1-1) close to the Bayonne Bridge includes the North Shore Terminal, a provider of stone and other building materials. The subdistrict contains the future Van Name Van Pelt Plaza, set to become a rare community open space and ecological asset. A mix of zoning is found on the south side of Richmond Terrace, including M3-1 districts and residential districts R3A and R3-2, the latter permitting small multifamily apartment houses. A neighborhood commercial district serving the area includes delis, restaurants, and business suppliers. The subdistrict contains numerous vacant and underutilized parcels.

Goals: Community goals for this subdistrict are to **support job-intensive maritime industrial or light industrial**

uses, especially those with limited truck distribution requirements. This includes the utilization of limited deep-water access points for maritime uses to protect these prized waterfront sites within New York Harbor that provide access for deep-draft vessels and support the city's critical marine services sector. The community also wishes to **support as-of-right adaptive reuse or new construction on vacant property** to leverage the potential of this district to support a larger number and wider variety of industrial businesses that can create quality jobs accessible to local residents. Finally, a key transportation goal for this subdistrict is roadway widening and improved access along Richmond Terrace as may be feasible to **improve traffic circulation and mitigate congestion** on this narrow neighborhood thoroughfare.



Fig. 63: Clockwise from Top Left: May Ship Repair; Waterfront Self-Storage Facility; Ethnic Restaurant Within Neighborhood Commercial District; McAllister Towing



SUBDISTRICT KEYMAP

**CREATIVE INDUSTRY:
GRANITE AVENUE**

Existing Conditions: The fourth and final subdistrict is centered on a high-intensity manufacturing zone (M3-1) extending south from Richmond Terrace at Granite Avenue and including a large assemblage of industrial properties bounded by Lake Avenue, Granite Avenue, Walker Street, and the North Shore Railroad right-of-way. This area contains a range of industrial tenants including food distributors, automotive uses, warehouse and storage facilities, and a large plumbing supplier. These uses are in close proximity to the surrounding low-density residential neighborhood (R3A and R3-2) as well as an educational facility serving children with autism. In addition,



Fig. 64: Residential Dwellings Adjacent to Industrial Uses on Granite Avenue

the site is directly across Walker Street from a heavily used community baseball facility, which draws pedestrian traffic during games and poses a potential safety hazard given the volume of truck traffic entering and exiting the Granite Avenue industrial block. The area’s significant volume of truck traffic also reflects the proximity of Morningstar Road and several entry and exit ramps to the Bayonne Bridge, with its regional connections via Route 440. Granite Avenue is characterized by a relatively more industrial context, while Lake Avenue tends to be more residential in character between Walker Street and Richmond Terrace.

Goals: The community wishes to **encourage light industrial and office uses within this district, particularly creative-sector**

production, small manufacturing, and “maker” uses that do not generate truck traffic through adjacent residential neighborhoods. To advance this goal, the team focused on the industrial “district” block bounded by Granite Avenue to the south, Lake Avenue to the west, and Walker Street to the east, and recommends a series of improvements and interventions. As-of-right adaptive reuse of existing underutilized buildings is desired, as well as strategies to better utilize the district’s large open areas that are currently devoted to parking, storage, and vehicular circulation. In addition, there is broad community support for **rerouting existing truck traffic off Lake Avenue** to reduce negative impacts on local residents.



Fig. 65: Clockwise from Top Left: Industrial Tenants at 125 Lake Avenue; Loading Bay on Lake Avenue; Site Entry Point on Walker Street; Adjacent Residential Context

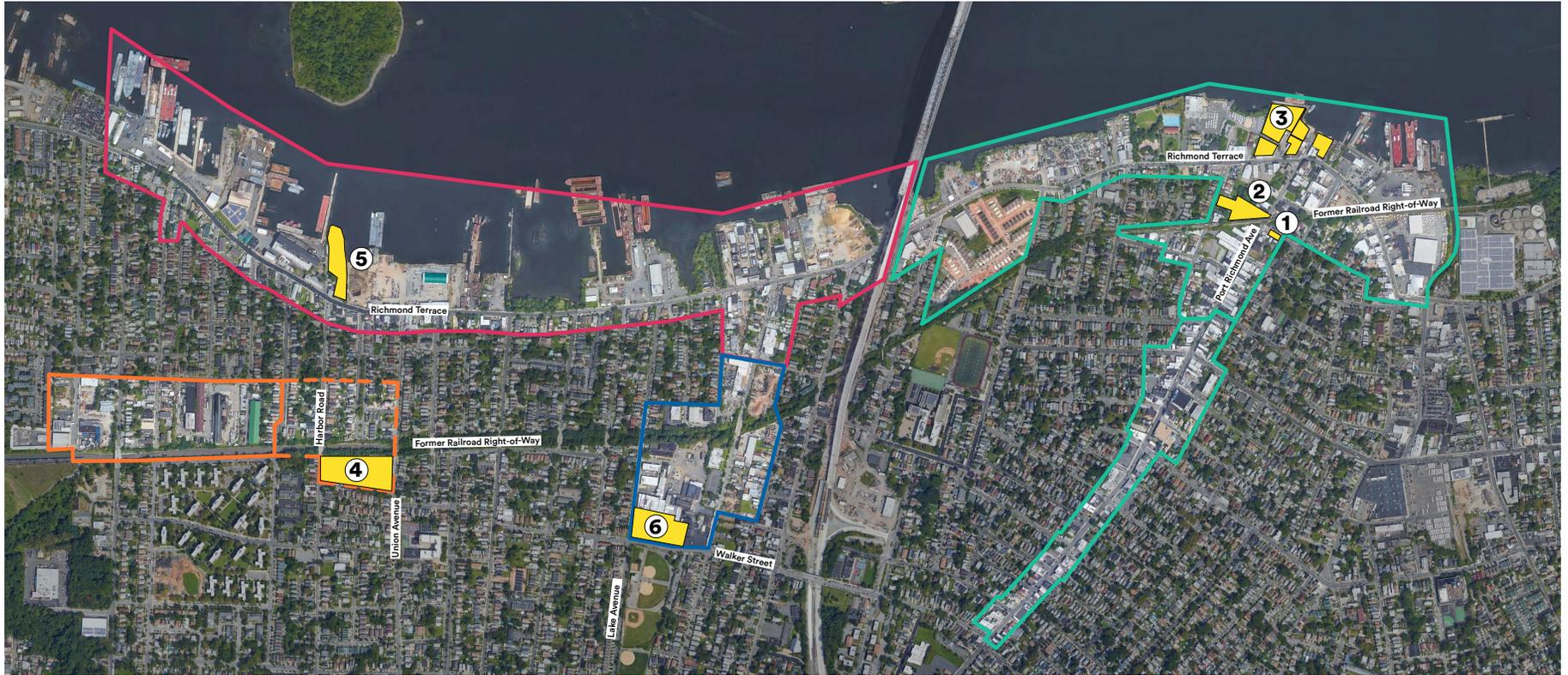


Fig. 66: Strategic Site Map

III. STRATEGIC SITE REDEVELOPMENT SCENARIOS

The identification of strategic site redevelopment scenarios is a key component of the BOA Step 2 Nomination Study. These representative sites offer templates whose strategies can apply to vacant and underutilized properties throughout the study area. Tailored to each subdistrict, the redevelopment strategies presented below are both pragmatic and visionary. They provide actionable scenarios that are grounded in market realities and modeled to reflect known site conditions

and regulatory constraints. Using market data collected during the submarket analysis and industry-standard assumptions for construction and financing, the BOA team has conducted a pro forma analysis to assess the development feasibility of each scenario and provide guidance on potential financing and incentive structures to improve project feasibility. At the same time, certain strategies are aspirational, offering visions of future development that may not be attainable in the near term, but are potentially feasible as the market continues to evolve. By testing these scenarios now, and identifying steps needed to achieve them, the BOA process can galvanize the

community support, partnerships, and investments that will be instrumental in seeing such longer-term visions to fruition.

Six strategic sites have been nominated for the BOA study area. These sites are grouped under three broad land-use types. Three **mixed-use residential developments** are proposed for the Port Richmond Avenue subdistrict. These include the redevelopment of a modest property along the commercial corridor, activation of a key underutilized area along the North Shore Railroad right-of-way, and a new community anchor at the northern end of Port Richmond Avenue. In the Union

Avenue subdistrict, a **community facility** is proposed that would provide critical medical services to support neighborhood health and well-being. Lastly, two **commercial and industrial** scenarios are proposed: a maritime education center on a waterfront parcel along Richmond Terrace, and on Granite Avenue, what is now a fragmented industrial district with negative community impacts would be reimagined to promote a more coherent district of creative and compatible manufacturing uses.

Each redevelopment scenario describes a potential use program and building typology, taking into account neighborhood needs and priorities, market feasibility, known brownfield issues, urban design opportunities, and zoning considerations. These ambitious and yet achievable visions represent a cross-section of site typologies, land uses, neighborhood contexts, and financial tools. They marshal the BOA area’s social, economic, and environmental assets in service of community goals, while showing how dormant properties can be reactivated as catalysts for revitalization.

SITE SELECTION CRITERIA

To identify strategic sites, the BOA team developed a number of criteria to assess their suitability to create catalytic community impacts. First, the team considered a site’s market readiness, including criteria such as public or private site ownership, whether a known or engaged owner has been identified, whether a site has been actively listed on the market, and its listing price. Second, the team evaluated site readiness. This

included assessing criteria such as zoning characteristics, maximum allowable floor area, unused floor area, as-of-right permitted uses, building condition, and flood risk. Third, the team evaluated catalytic impact potential through criteria that included site scale, proximity to public transit and truck routes, connection to open space, and fit for the proposed program. Additional criteria considered included community support for site redevelopment, and the potential for neighborhood development and job generation. In considering strategic sites, the team also sought to ensure a distribution of properties across the area’s four subdistricts, and took into account a site’s actual or perceived brownfield status.

Through an initial walking tour of the BOA area, along with an analysis of vacant, underutilized, and brownfield properties conducted as part of the existing conditions research discussed in Section 3, the project team developed an initial list of 15 sites, whose detailed profiles are included in the Appendix. This list included a number of sites identified during Phase One of the Port Richmond-Mariners Harbor BOA study. The Phase One Nomination Report put forth six strategic sites, one conditional strategic site, and two potential strategic sites, all clustered at the northern end of Port Richmond Avenue and along the Kill Van Kull waterfront.

| SITE EVALUATION MATRIX | 1 Richmond Chandelier | 2 Port Richmond Storefront | 3A City-Owned Waterfront | 3B Former Standard Boat | 3C Flag Services | 4 Harbor Road | 5 Union Ave | 6 Walker St. |
|------------------------------|--------------------------|-------------------------------|-----------------------------|----------------------------|---------------------|------------------|----------------|-----------------|
| MARKET READINESS | 3 | 5 | 3 | 1 | 1 | 4 | 3 | 4 |
| RE Market for Proposed Use | ● | ● | ● | ● | ● | ● | ● | ● |
| Ownership | Private | Private | Public | Private | Private | Private | Private | Private |
| Known/Engaged Owner | CONFIRM | Yes | CONFIRM | No | No | Yes - TBD | CONFIRM | Yes - TBD |
| Live on Market | CONFIRM | Yes | CONFIRM | No | No | Yes - TBD | CONFIRM | Yes - TBD |
| SITE READINESS | 3 | 5 | 3 | 1 | 1 | 4 | 3 | 4 |
| Built Status | Vacant | Partial | Vacant | Vacant | Partial | Partial | Vacant | Built |
| Zoning Action? | Maybe | Maybe | YES | YES | YES | NO | Maybe | NO |
| Current Zoning | C4-2 | C4-2 | M3-1 | M3-1 | M3-1 | M3-1 | R3A | M3-1 |
| Max. Allowable FAR | 3.4 | 3.4 | 2.0 | 2.0 | 2.0 | 2.0 | 1.0 | 2.0 |
| % Underbuilt | 100% | 51% | 100% | 100% | 90% | 98% | 87% | 7% |
| Flood Risk | 500 yr | Outside | 100 yr | 100 yr | 100 yr | 100 yr | Outside | Outside |
| CATALYTIC IMPACT | 4 | 4 | 5 | 5 | 5 | 4 | 5 | 4 |
| Site Scale | | | | | | | | |
| Lot Size (Acres) | 0.80 | 0.1 | 0.45 | 0.62 | 2.6 | 2.2 | 1.68 | 0.93 |
| Proximity to Public Transit | ● | ● | ● | ● | ● | ● | ● | ● |
| Proximity to Truck Routes | ● | ● | ● | ● | ● | ● | ● | ● |
| Connection to Open Space | ● | ● | ● | ● | ● | ● | ● | ● |
| Fit for Proposed Program | ● | ● | ● | ● | ● | ● | ● | ● |
| Community Support | - | - | - | - | - | - | - | - |
| Neighborhood Development | ● | ● | ● | ● | ● | ● | ● | ● |
| Job Generation | ● | ● | ● | ● | ● | ● | ● | ● |
| Distribution of Subdistricts | Mixed-Use | Mixed-Use | Mixed-Use | Mixed-Use | Mixed-Use | Waterfront | Neighborhood | Industry |
| TOTAL SCORE | 10 | 14 | 11 | 7 | 7 | 12 | 11 | 12 |

Fig. 67: Strategic Site Evaluation Matrix

The list of 15 sites was analyzed according to the strategic site criteria. In consultation with the Steering Committee, the final selection of six strategic sites was made based on those sites which ranked highest on a site evaluation matrix. The selected sites consist of a range of vacant, partially vacant, and built properties with locations in each of the study area's four subdistricts. They have been selected with an emphasis on their potential to achieve catalytic community impacts, fulfill identified community goals, and serve as models that can guide public and private investment in similar sites throughout the study area. Complete environmental assessments for each site are included in the Appendix.

AREA-WIDE CONSTRAINTS AND OPPORTUNITIES

As the project team developed the strategic site scenarios, key considerations have been identified regarding market potential for sites across all four subdistricts.

Many redevelopment scenarios exhibit feasibility gaps today.

Many of the strategic site proposals outlined below show funding gaps. The economic challenges inherent in these scenarios are driven by a number of factors. Within the BOA study area, a clear market exists for new single-family, for-sale homes, but there is a limited track record for multifamily rental housing. The project team's analysis shows that the feasibility of multifamily construction depends on a project's ability to command rents that are approximately 10% higher than study

area rents today. Moreover, for larger redevelopment projects, the cost of creating structured parking to accommodate parking requirements adds to the financial gap. Larger projects also have a slow absorption timeframe, given the relatively small number of units the BOA area market can be expected to absorb each year. As a consequence, more ambitious projects with higher density require additional investment to sustain a project until it is fully occupied. Meanwhile, the development of industrial and community facilities is often financially challenging, even amid a climate of economic growth.

Subsidy programs exist to help fill gaps in the near term.

To achieve community-supported redevelopment goals, these project gaps can be filled through a variety of subsidy programs. For mixed-income housing, programs such as the Low-Income Housing Tax Credit can increase project feasibility while ensuring long-term affordability. This tax credit can be particularly powerful when combined with tax incentives through the Opportunity Zone program described below. Brownfield Tax Credits and other programs tied to the area's environmental challenges can also help close the gap, as can other programs managed by the NYC Department of Housing Preservation and Development that help subsidize affordable housing and community facility development. Lastly, programs are available to reduce direct or indirect costs for industrial companies and builders who grow the area's workforce. The most relevant such programs are summarized in Figure 68.

Two programs deserve special mention due to their potential to support redevelopment within the BOA area. The first is the Environmental Zone ("En-Zone"), which includes census tracts with a poverty rate of at least 20% and an unemployment rate at least 1.25 times the statewide rate. In the study area, these zones include sections between Port Richmond Avenue and Morningstar Road, and the area west of Harbor Road. Applicants to the New York State Brownfield Cleanup Program for sites within an En-Zone may receive additional tangible property tax credits of 5%.

The second program is the federal Opportunity Zone initiative. Launched in 2017, the program identifies economically-distressed communities where new investments may be eligible for preferential tax treatment. An Opportunity Zone is a low-income census tract with an individual poverty rate of at least 20% and median family income no greater than 80% of the area median. The BOA study area contains three census tracts designated as Opportunity Zones: 319.02, 223, and 207. These tracts encompass much of the study area, from Holland Avenue on the west to Jewett Avenue on the east. The designated area includes Port Richmond Avenue south to Charles Avenue, and the entire study area waterfront along Richmond Terrace. Opportunity Zones retain their designation for 10 years. Investors may defer tax on almost any capital gain up to Dec. 31, 2026 by making an appropriate investment in a zone. While there is no guarantee that investments will be made in a particular zone, a strong framework such as the BOA Revitalization Plan is essential to help steer

| Tool | Program | Source | Benefit | Key Points |
|---|--|---------------------------|---|---|
| <i>Capital Support</i> | Regional Economic Development Council Capital Fund Program | NYS | Capital Grant | Funding for capital-based economic development initiatives for job development and/or retention. |
| <i>Tax Incentives</i> | Industrial and Commercial Abatement Program (ICAP) | NYC Department of Finance | Property Tax Abatement | Provides abatements for property taxes of up to 25 years. |
| <i>Tax Incentives</i> | Relocation and Employment Assistance Program (REAP) | NYCEDC | Local Tax Credit | 12-year annual tax credit of \$3,000 for each qualified job relocated into targeted areas. |
| <i>Tax Incentives</i> | Industrial Incentives for Developers | NYC IDA | Sales Tax Exemption and Mortgage Recording Tax Waiver | Developers of designated spaces can seek waivers and exemptions on specified taxes. |
| <i>Other</i> | Futureworks NYC Services | NYCEDC | Technical Assistance | Provides funding for services focused on creating employment opportunities in advanced manufacturing. |
| <i>Additional</i> | | | | |
| <i>Industrial:</i> Con Edison Economic Development Program, Emerging Developer Loan Fund, Energy Cost Savings Program, Exempt Facilities Bond Program, Manufacturing Facilities Bond Program, NYC Industrial Developer Fund, NYCIDA Industrial Program, Sales Tax Exemption for Manufacturers | | | | |

Fig. 68: Funding and Incentive Programs for Industrial Development Initiatives Within the BOA Area

potential investments to projects that have been identified as community priorities.

Advance planning will help align future growth with community priorities.

Despite current redevelopment challenges, the BOA area is well positioned to capitalize on opportunities in the coming years. A growing residential population will strengthen retail demand, while a stronger retail district will in turn attract new residents. The mixed-use scenarios detailed below are intended to support this

cycle of synergistic housing and commercial growth. New jobs, like those proposed in this section’s industrial-sector revitalization scenarios, also increase neighborhood desirability. Clear momentum on the North Shore—both in rent and in demand for condominiums—can also be expected to fuel market growth and increase the feasibility of revitalization efforts.

To equitably harness market momentum, advance planning is important. The BOA process can help position Port Richmond and Mariners Harbor to capitalize on

revitalization opportunities for the benefit of both existing and future residents. This is critical given potential game-changing investments that could fuel broader investment in the BOA area. These include a possible Bus Rapid Transit connection to St. George, the activation of the North Shore Railroad viaduct (whether above or below), and a future ferry connection to Manhattan. The continued and focused leadership of Northfield Community LDC and other stakeholders will help ensure that such transformative investments are shaped to support community goals and priorities.

PORT RICHMOND AVENUE STOREFRONT

97 Port Richmond Avenue

The Socially Sustainable Storefront

Exploring strategies to address storefront vacancies on Port Richmond Avenue, this scenario offers a model for enhancing the street's residential and commercial vibrancy. Adaptive reuse of the building would add affordable residential units to the site, while remaining sensitive to community context and restoring an active ground-floor retail space to serve neighborhood needs.

Site Profile: This site consists of Tax Block 1005, Lot 8 and is bounded by Port Richmond Avenue to the west, commercial units to the north and south, and residential units to the east. It is located within the Mixed-Use Corridor subdistrict, zoned as C4-2. It occupies a lot between Bennett and Ann Streets on a block just south of the North Shore Railroad viaduct. The site is developed with a three-story commercial building including upper-story residential units, a first-story extension to the rear of the lot, and a garage. Property records indicate that the existing building was built in 1931, and was most recently used as a retail store.

Environmental Assessment: Based on a review of Sanborn Maps, historical uses of properties adjoining and surrounding the site include dry cleaning facilities, an auto garage, filling stations, paint stores, and parking facilities. A site of potential environmental concern was identified within a 400-foot buffer at 70 Park Avenue containing underground fuel-oil storage tanks. These surrounding uses may have adversely impacted the environmental quality of the site, including soil, groundwater, and soil vapor. Further investigation should be performed to determine the extent of potential



Fig. 69: 97 Port Richmond Avenue



EXISTING CONDITION

environmental impacts. Because the development or reuse of the property may be complicated by the presence or potential presence of contaminants, the site is recommended for a BOA nomination. Due to its location within an En-Zone, the property would be eligible for additional tax credits under the Brownfield Cleanup Program.

Redevelopment Vision: Port Richmond Avenue’s vibrancy has been dimmed by a significant number of storefront vacancies that interrupt the retail frontage and contribute to a sense of neighborhood disinvestment and diminished street life. At the same time, the creation of more affordable housing units is a top priority for the community, which particularly seeks to provide housing that can serve immigrant workers and others employed by the area’s

retail and service businesses. The BOA team thus explored the feasibility of redeveloping this property to maximize the creation of affordable residential units, restore its storefront retail space, and respect the historic height and character that define the commercial corridor’s walkable scale.

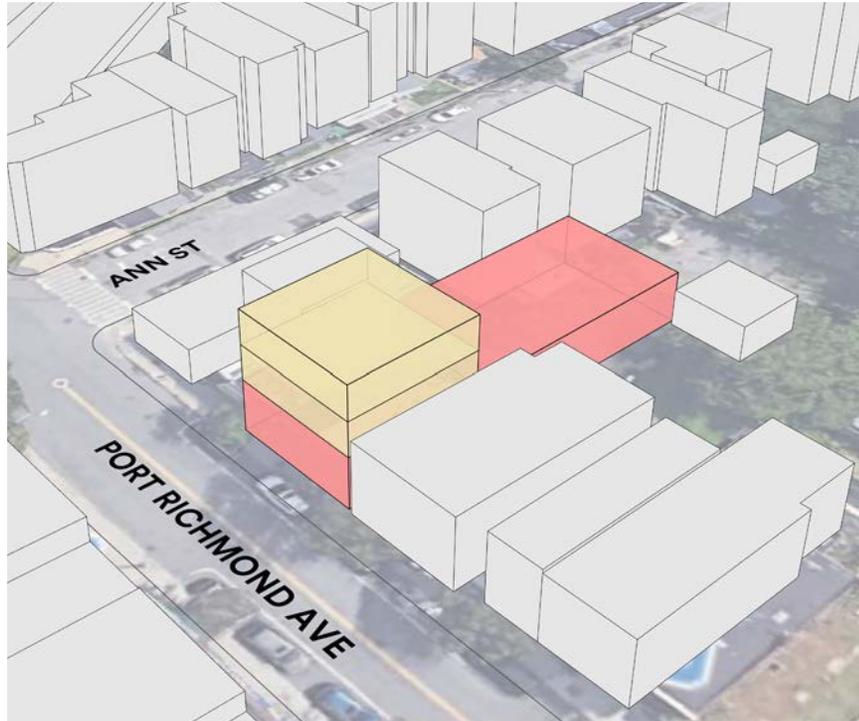
While many properties along the avenue are distinguished by their architectural character befitting a regional commercial center, this aging building falls into a second class of structures that has lost its original detail and charm over time. The project team thus tested a variety of redevelopment strategies to consider the most effective uses of the building and site. The two most viable options for this property proved to be adaptive reuse and as-of-right demolition and rebuild.

SITE 1 KEYMAP

The first scenario would rehabilitate the structure in its existing footprint, retaining its three-story, 35-foot height and rear ground-floor extension. The scenario allows for three residential units on the upper two stories totaling 3,079 square feet, plus a ground-floor commercial space of 4,376 square feet for a total project area of 7,455 square feet.

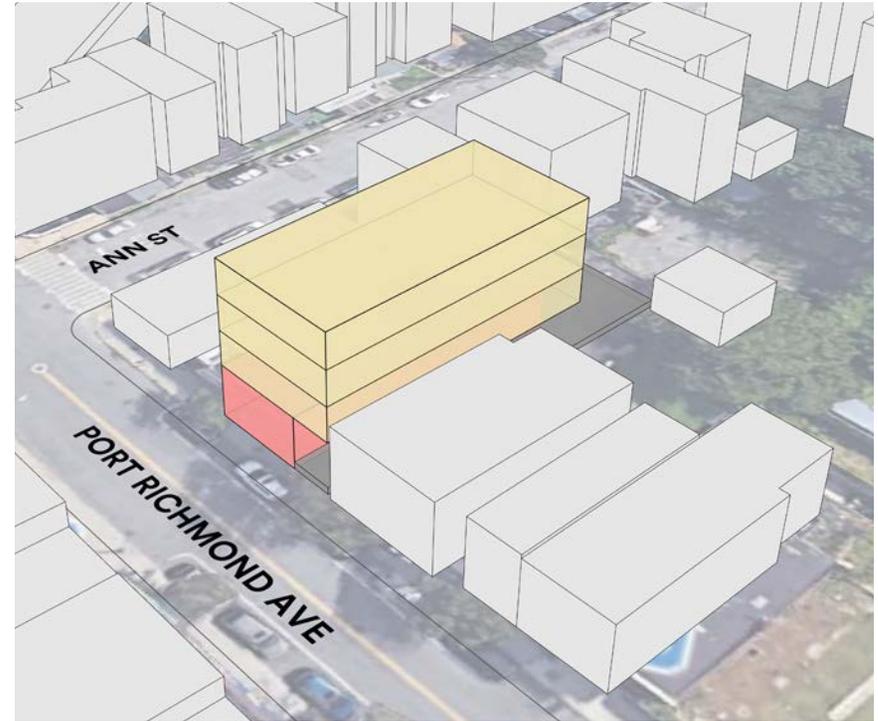
The second scenario would demolish the existing building and construct a 4-story building reaching 45 feet in height. Extending the upper three residential floors to the rear of the lot would provide 10 residential units totaling 9,641 square feet. In this scenario, the ground-floor commercial space is reduced by nearly half to 2,204 square feet, due to the need to provide six parking spaces at the rear of the lot. This

ADAPTIVE REUSE SCENARIO



| | |
|--|--------------------|
| Zoning | C4-2 |
| Max. Commercial FAR | 3.4 |
| Max. Residential FAR | 2.2 |
| Lot Area (SF) | 4,376 |
| Max Building Height (FT) | 55 |
| ZSF | 14,878 |
| GSF | 7,500 |
| Proposed Commercial GSF | 4,500 |
| Proposed Residential GSF | 3,000 |
| Proposed Residential Units | 3 |
| Proposed Parking Spaces | 0 |
| Total Development Costs (Incl. Acquisition) | \$3,900,000 |
| Potential Value of Brownfield Tax Credits | (\$350,000) |
| Development Costs After Tax Credits | \$3,550,000 |
| Project Gap | (\$270,000) |
| Project Gap per Built SF | (\$36.00) |

DEMOLITION AND REBUILD SCENARIO



| | |
|--|--------------------|
| Zoning | C4-2 |
| Max. Commercial FAR | 3.4 |
| Max. Residential FAR | 2.2 |
| Lot Area (SF) | 4,376 |
| Max Building Height (FT) | 55 |
| ZSF | 14,878 |
| GSF | 12,000 |
| Proposed Commercial GSF | 2,000 |
| Proposed Residential GSF | 10,000 |
| Proposed Residential Units | 10 |
| Proposed Parking Spaces | 6 |
| Total Development Costs (Incl. Acquisition) | \$4,950,000 |
| Potential Value of Brownfield Tax Credits | (\$400,000) |
| Development Costs After Tax Credits | \$4,550,000 |
| Project Gap | (\$370,000) |
| Project Gap per Built SF | (\$30.83) |



Fig. 70: Storefront Vacancies on Port Richmond Avenue

rear parking area would be accessed by a driveway running beneath the structure's cantilevered upper stories at the side of the lot. This scenario, totaling 11,845 square feet, provides significantly more residential units, although it does exceed the typical height along this part of Port Richmond Avenue, which consists almost entirely of one-, two-, and three-story buildings.

Financial Feasibility Analysis: Both scenarios show a gap between market-rate property values and what a private developer would be able to pay. Due to the deteriorated condition of the building, which appears to have significant interior structural damage, it is unclear whether the adaptive reuse scenario would provide cost savings over the demolition and rebuild scenario. Given the expense of rehabilitating such a compromised structure, it could prove more feasible to demolish the building and rebuild in its entirety.

This analysis shows that maximizing residential units on Port Richmond Avenue will require subsidies that could potentially be provided under affordable housing programs such as the Low-Income Housing Tax Credit or NYC Housing Preservation and Development programs intended to support the creation of affordable homes. Other subsidies, such as those provided by New York State's Main Street program, are also available for projects that revitalize mixed-use neighborhood commercial districts. The potential for rising commercial rents within the corridor as the retail environment improves could help offset the funding gap, making such projects more feasible over time. However, a community desire to provide deeper levels of affordability, making these units accessible to low-income families, would require increased subsidy levels.

Conclusion: Despite its challenges, this scenario has significant potential to inform similar redevelopment projects along Port

Richmond Avenue. The area has seen a number of recent projects to restore residential and commercial space, showing that the successful redevelopment of properties on the avenue is possible given available subsidy sources.

For example, at 162 Port Richmond Avenue, a new two-bedroom apartment over street-level retail was completed in 2017. Northfield Community LDC selected this project to receive a New York Main Street grant of \$75,000, and a new furniture store has subsequently opened in the ground-floor space. At 128-130 Port Richmond Avenue, also designated for a New York Main Street grant of \$200,000, the site's redevelopment is expected to result in 10 new apartments and two retail spaces. And at 41 Port Richmond Avenue, a Phase One strategic site, the property owner recently filed for approval of a 4-story apartment building. With additional properties under study for redevelopment, models for the creation of affordable residential space along the corridor can help sustain working families while restoring a vibrant retail district.

RICHMOND CHANDELIER SITE

76 Port Richmond Avenue

Activating the Avenue

Affordable housing with a placemaking focus would activate a key node on Port Richmond Avenue. Now largely a parking lot, this site would see mixed-income residences with art studios and creative spaces. A public forecourt would enliven the adjacent rail viaduct with an outdoor cafe or market. Alternative scenarios offer townhomes with a light industrial building, or apartments with ground-floor retail and commercial units that would add density and affordability. Both visions promise to create a key link between the avenue's commercial core and the waterfront.

Site Profile: This 1.1-acre site consists of Tax Block 1073, Lots 200, 97, and 31. It is bounded by Port Richmond Avenue to the east, commercial units to the north, and residential units to the west. Directly to the south is the elevated viaduct for the North Shore Railroad. The property extends the full width of the block, offering frontage on both Port Richmond Avenue and Maple Avenue. Located within the Mixed-Use Corridor subdistrict, and zoned C4-2, the site is partially built with a single one-story commercial building and an asphalt paved parking lot located south of the building. The site is currently used by lighting and electrical supplier Richmond Chandelier for storage and parking, operated in conjunction with the company's retail storefront and lot across the street.

Environmental Assessment: Based on a review of Sanborn Maps, historical site use as a filling station and a paint and wallpaper store may have impacted soil, groundwater, and/or soil vapor on the property. A site of potential environmental concern at 17 Grove Avenue was also identified within an approximate 400-foot buffer during a review of environmental databases and historical records. That site is listed in the NY Spills database for an open spill case and was previously used as a gas station. Further



Fig. 71: Richmond Chandelier Site



EXISTING CONDITION

investigation should be performed to determine if any of the above-identified environmental concerns have adversely impacted the environmental quality of the site. As the development or reuse of the property may be complicated by the presence or potential presence of contaminants, the site is recommended for a BOA nomination. Due to its location within an En-Zone, the property would be eligible for additional tax credits under the Brownfield Cleanup Program.

Redevelopment Vision: Located at a nexus between the commercial heart of Port Richmond Avenue and the Kill Van Kull, this largely underutilized property holds particular promise to create a new node reconnecting the community to the water. The relatively large size of the site offers an opportunity to design a multilayered, mixed-

use development that would be unique in Port Richmond and Mariners Harbor for its combination of mixed-income housing, creative retail spaces, and public amenities. Two residential typologies were studied. The first option includes a mixed-use building that maximizes retail frontage along Port Richmond Avenue. Four residential stories rise above the 5,000-square-foot ground-floor retail space, bringing the maximum building height to 55 feet. A lower setback along the avenue provides consistency with adjacent buildings, rising three stories to 35 feet. At the rear of the site, along Maple Avenue, a second residential building rises six stories to 55 feet, again with a setback to meet the neighborhood context at 45 feet. A parking area between the two buildings is accessed from Maple Avenue. With a total of 112 residential units, the development



SITE 2 KEYMAP

would substantially contribute to the revitalization of this portion of the retail corridor, increasing street life, retail activity, and affordable housing.

The second option explored two-story rowhouses on the site, modeling a typology more typical of the community context. This option would provide 21 residential units broken into three blocks. Two blocks would be set back from Port Richmond Avenue in the center of the site, with the third set along Maple Avenue. A two-story, light-industrial building would be constructed on Port Richmond Avenue, adjacent to the existing commercial structure to the north of the site. This building would offer potential use by artists, small manufacturers, and other creative production facilities.

MULTIFAMILY MIXED-USE SCENARIO



ROWHOUSE/LIGHT INDUSTRIAL SCENARIO



| | |
|----------------------------|---------|
| Zoning | C4-2 |
| Max. Commercial FAR | 3.4 |
| Max. Residential FAR | 2.2 |
| Lot Area (SF) | 48,609 |
| Max Building Height (FT) | 55 |
| ZSF | 165,271 |
| GSF | 117,000 |
| Proposed Commercial GSF | 5,000 |
| Proposed Residential GSF | 112,000 |
| Proposed Residential Units | 112 |
| Proposed Parking Spaces | 77 |

| | |
|---|---------------|
| Total Development Costs (Incl. Acquisition) | \$40,080,000 |
| Potential Value of Brownfield Tax Credits | (\$2,800,000) |
| Development Costs After Tax Credits | \$37,280,000 |

| | |
|--------------------------|---------------|
| Project Gap | (\$1,985,000) |
| Project Gap per Built SF | (\$16.97) |

| | |
|----------------------------|---------|
| Zoning | C4-2 |
| Max. Commercial FAR | 3.4 |
| Max. Residential FAR | 2.2 |
| Lot Area (SF) | 48,609 |
| Max Building Height (FT) | 55 |
| ZSF | 165,271 |
| GSF | 36,000 |
| Proposed Commercial GSF | 6,000 |
| Proposed Residential GSF | 30,000 |
| Proposed Residential Units | 21 |
| Proposed Parking Spaces | 32 |

| | |
|---|---------------|
| Total Development Costs (Incl. Acquisition) | \$16,855,000 |
| Potential Value of Brownfield Tax Credits | (\$1,300,000) |
| Development Costs After Tax Credits | \$15,555,000 |

| | |
|------------------------------|-------------|
| Project Surplus | \$1,025,000 |
| Project Surplus per Built SF | \$28.47 |



Fig. 72: Richmond Chandelier Site, Clockwise from Top Left: Railroad Viaduct; Beneath the Viaduct; Maple Avenue Neighborhood Context; The Site from Maple Avenue

In both scenarios, the property’s adjacency to the rail viaduct—currently an unwelcoming neighborhood barrier—presents an opportunity to turn a liability into an asset. This space underneath the viaduct could potentially be activated with cultural uses such as a farmer’s market, art installations, and performances. Public outdoor space could also be created along the edge of the Richmond Chandelier property, which could host a café, seating area, or green space.

The site’s vulnerability to flooding—it lies partially within the 500-year flood plain—would need to be addressed in either scenario by locating critical uses above the flood elevation and providing other resiliency measures to ensure the safety of residents and commercial tenants.

Financial Feasibility Analysis: With nearly 120,000 square feet, the mixed-use option is an ambitious redevelopment scenario and

carries a significant funding gap. However, the rowhouse/light industrial scenario, with 36,000 square feet, represents a much lower capital investment. With higher for-sale valuations given the existing market for rowhouses and two-family homes within Port Richmond and Mariners Harbor, the rowhouse scenario does operate at a surplus to the developer.

In both cases, the Brownfield Tax Credit could potentially offset expenses, along with affordable housing or other subsidies that could include the New York City Department of Housing Preservation and Development’s Mixed Income or Mixed Middle Income programs. The latter program, for example, funds the new construction of multifamily rental housing affordable to low-, moderate-, and middle-income families up to 165% of area median income (AMI). Under the initiative, 20% of the units in a new development must be reserved for low-income households earning less than 50% of the New York City AMI, with at least 15% of these low-income units set aside for very low-income families earning less than 40% of AMI.

Conclusion: This site’s location on the north side of the railroad viaduct presents a transition point between the lower-scale retail corridor to the south and the industrial-scale uses of the waterfront. Whether developed through the achievable rowhouse scenario—or through the more ambitious mixed-use option—the site can be leveraged to reconnect these two areas, while providing needed affordable housing and supporting cultural activity to fulfill key community goals for the subdistrict.

PORT RICHMOND WATERFRONT SITE

Richmond Terrace and Port Richmond Avenue

A Catalytic Community Destination

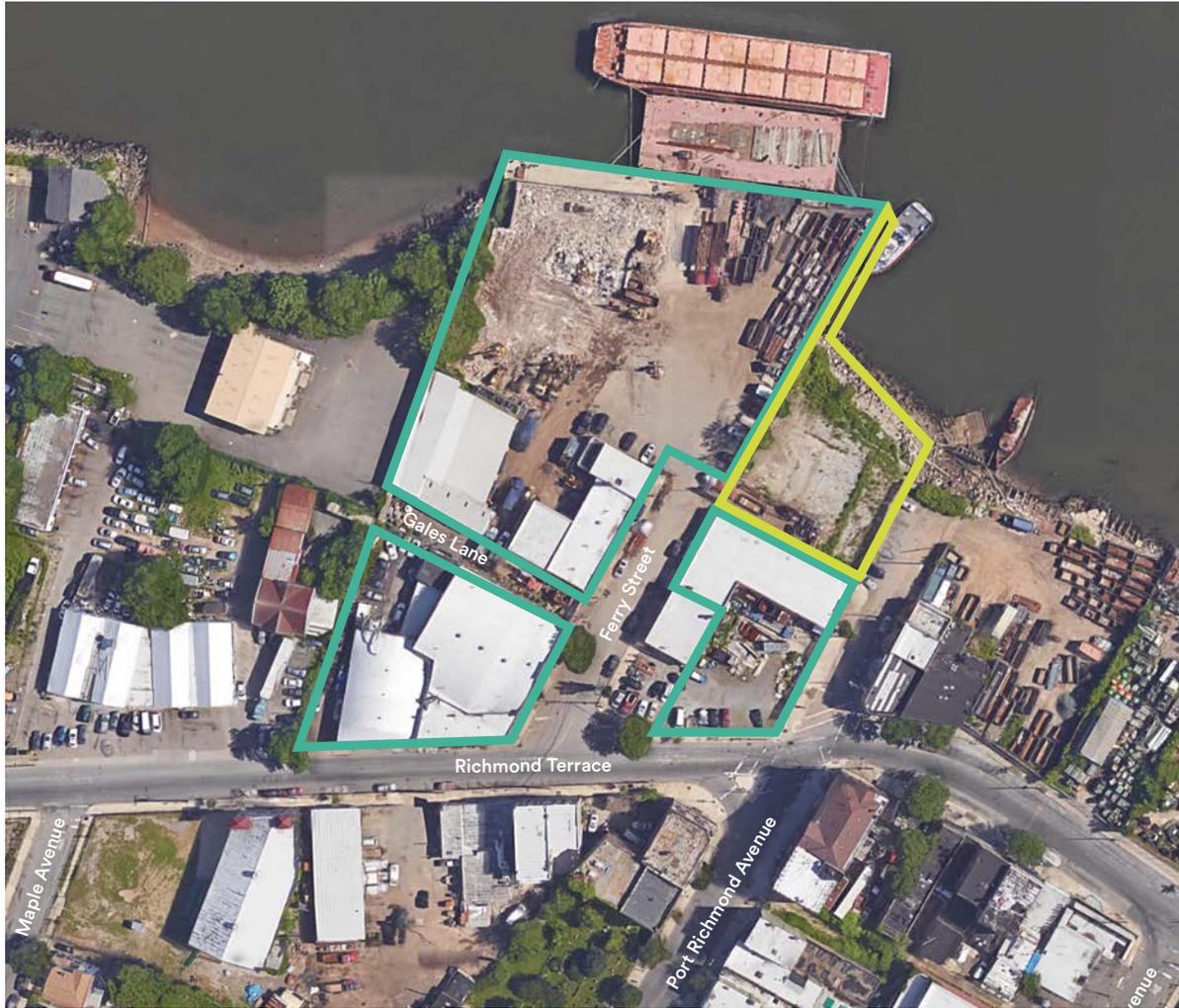
This assemblage of sites at the northern end of Port Richmond Avenue would create a new community anchor with a destination open space on the Kill Van Kull. Rezoning for mixed-use development would connect Port Richmond's commercial district to the water, add new affordable housing, create a North Shore greenway link, and potentially reactivate an adjacent historic ferry stop.



Fig. 73: The Kill Van Kull Viewed from the Port Richmond Waterfront Site

Site Profile: This assemblage of 13 tax lots at the northern end of Port Richmond Avenue contains 4.8 acres of waterfront property. It is located within the Mixed-Use Corridor subdistrict, and is currently zoned M3-1 for high-intensity manufacturing use. One of the lots in the assemblage (Tax Block 1068, Lot 1) is vacant and publicly owned by the New York City Department of Small Business Services. The majority of the remaining lots are owned by Ferry Street Enterprises and occupied by Flag Container Services. These lots include the former Standard Boat Company site (Tax Block 185, Lots 568 and 578), which is largely vacant, and a series of lots that constitute Flag Container Services' operating facilities including a construction and demolition waste transfer station (Tax Block 1068, Lots 9, 14, 17, 44, 45, 60, and 67). These lots also contain multiple warehouse buildings, an undeveloped area for the staging of vehicles and equipment, and a church and auto body shop. In addition, the assemblage incorporates three lots occupied by small businesses including a live poultry slaughter house, a liquor store, a small restaurant, and a deli (Tax Block 185, Lots 572, 575, and 576).

Environmental Assessment: These sites have been used for a wide array of activities in the past including a shoemaker, a hotel, lumber yards, coal storage, lime storage, oil and gasoline storage, a cement and asphalt plant, and mason materials storage. Several



EXISTING CONDITION

sites of potential environmental concern were identified within a 400-foot buffer during a review of environmental databases and historical records. Flag Container Services is listed in multiple environmental databases. Its properties contain three onsite tanks for used oil storage, and had a reported spill from the dispensing of diesel from a fuel truck. The facility is also listed

for prior storage of mercury. On the former Standard Boat Company site, a gasoline spill was caused by the leaking of fluids from tanks of junked vehicles. The adjacent intersection of Richmond Terrace and Port Richmond Avenue is listed for a 100-gallon raw sewage spill. Due to the historic and current site uses, documented contamination, and surrounding automotive and industrial oper-



SITE 3 KEYMAP

ations, these sites may have adverse environmental impacts to soil, groundwater, and soil vapor. Further investigation is recommended to determine if the above-identified environmental concerns have adversely impacted the properties. As the development or reuse of the properties may be complicated by the presence or potential presence of contaminants, these sites are recommended for a BOA nomination. Due to its location within an En-Zone, the property would be eligible for additional tax credits under the Brownfield Cleanup Program.

Redevelopment Vision: This redevelopment scenario represents the most aspirational vision of the six strategic sites. As the gateway to the Port Richmond Avenue commercial district, and a key location on the Kill Van Kull with potential to provide open

MEDIUM DENSITY MIXED-USE REZONING SCENARIO



| | |
|---|----------------|
| Proposed Zoning | M3-1/R6 |
| FAR | 2 |
| Lot Area (SF) | 160,300 |
| Max Building Height (FT) | 55 |
| GSF | 365,000 |
| Proposed Commercial GSF | 15,000 |
| Proposed Residential GSF | 350,000 |
| Proposed Residential Units | 350 |
| Proposed Parking Spaces | 350 |
| Structured Parking Spaces | 171 |
| Open Space and Street Infrastructure Costs | \$5,910,000 |
| Development Costs (Incl. Acquisition) | \$151,155,000 |
| Total Development Costs (Incl. Acquisition) | \$157,065,000 |
| Potential Value of Brownfield Tax Credits | (\$14,800,000) |
| Development Costs After Tax Credits | \$142,265,000 |
| Project Surplus | \$12,310,000 |
| Project Surplus per Built SF | \$33.73 |

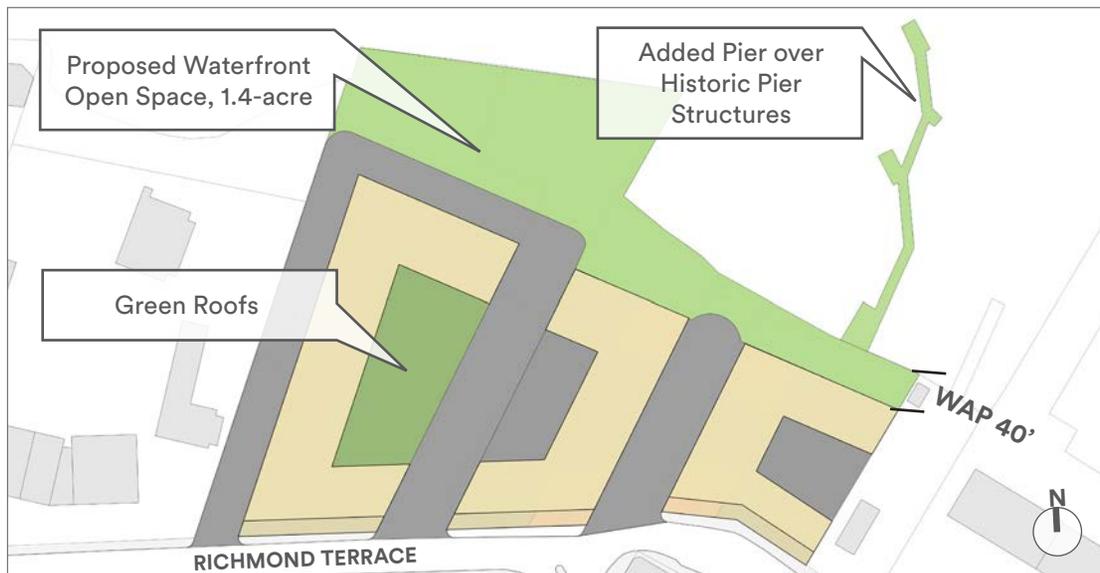




Fig. 74: Clockwise from Top Left: Port Richmond Avenue at the Kill Van Kull; Former Standard Boat Site; Existing Waterfront Condition; Port Richmond Avenue and Richmond Terrace

space and other amenities, the site offers an opportunity to repurpose a large waterfront parcel to better serve community needs and create a placemaking residential development that can anchor neighborhood growth.

To explore the site's potential as a catalytic mixed-use development, the project team evaluated a range of scales and densities, site configurations, parking scenarios, and financial models. In all of the site plans con-

sidered, the team prioritized a large waterfront open space accessible to the public. This 1.4-acre open space would encompass the site's entire waterfront edge. The area would extend from a generous public space on the west, with views to the Bayonne Bridge, and connect on the east with a pier reconstructed on the site of historic pier structures. This community amenity would provide needed open space in an area with precious little parkland. It would also pro-

vide a key connection in the North Shore Greenway, potentially serving as a link in a future continuous pathway stretching from Heritage Park on the east to Faber Park, a 4-minute walk to the west. The greenway's transformative potential as an asset for community health and heritage would be significantly advanced by the site's redevelopment. This key node in an open-space corridor spanning between the Goethals Bridge and the Verrazano-Narrows Bridge would positively impact not just the BOA community but the entire North Shore.

To most successfully accommodate mixed-use construction on the remainder of the site, the team proposed removing Gales Lane, a short mapped street that bisects two of the lots and is currently used exclusively by Flag Container Services. This allows for a site plan with buildings clustered in three blocks and accessed by parallel roads ending in cul-de-sacs at the waterfront. The circulation plan offers the potential to separate pedestrian and vehicular access, while providing adequate fire access.

The team investigated a variety of massing and density scenarios, ranging from a relatively high floor-area-ratio of 4.6 (containing 13-story buildings with more than 750 residential units) to 1.5 (with up to five-story buildings and 245 units). In consultation with the Steering Committee and project partners, a plan for moderate density and a balanced approach to site massing was selected, resulting in a floor-area-ratio of 2.1. This plan would create three U-shaped buildings of up to five stories each, with a total of 350 residential units. The buildings would be set back to four stories, or 45 feet



SITE CONTEXT AND OPPORTUNITY

in height, along Port Richmond Avenue to contextually meet the surrounding neighborhood. The project would also include 15,000 square feet of ground-floor destination retail space, located at building corners along Port Richmond Avenue in the block between Richmond Terrace and the water.

In providing new, mixed-income residential units within the BOA area, this development would offer a needed diversity of housing options, particularly for younger, smaller, or new immigrant families that are seeking smaller rental units. The development also offers an ideal location to accommodate the community's growing population around a future transit hub. The site includes the landing for Port Richmond Avenue's original ferry service. Restoring a ferry dock in con-

nection with this new waterfront development would reconnect the area to its waterfront heritage while offering needed transit links to New Jersey and Manhattan.

Special care would need to be taken to implement resiliency measures on this site given its location within the 100-year flood plain. Adherence to all applicable New York City regulations regarding new residential construction in the flood plain will likely require site elevation strategies, as well as other solutions to mitigate flood hazards. This presents an opportunity to show how creative design and infrastructure solutions could be leveraged to provide safe housing at the water's edge at a time of rising sea levels and frequent severe weather events. In addition, parallel planning for appropriate

infrastructure to address development impacts such as school capacity, wastewater treatment capacity, and traffic circulation would also be necessary.

This ambitious scenario would require a rezoning from the existing manufacturing uses to accommodate mixed-use residential development. It would also require the relocation of existing businesses on the site, notably the construction and demolition waste transfer station. While this business provides a needed service to Staten Island and is a significant employer for Port Richmond and Mariners Harbor, its reliance on trucking and its open industrial uses present a source of conflict for the nearby neighborhood. Redevelopment of the property would include the identification of incentives that

would permit the existing business to relocate to a site better suited to its operational needs, while allowing the redevelopment of this catalytic Port Richmond property in accordance with community priorities.

Financial Feasibility Analysis: Unlike some strategic sites, this redevelopment scenario would be financially feasible, but with certain caveats. Feasibility depends on the inclusion of condominium units as part of the housing mix, which would reduce the number of affordable rental units available. Project costs are driven in part by the new infrastructure needed to accommodate the site's open space and streets, as well as the provision of 350 total proposed parking spaces for the project. Given the large number of new units contemplated and the current residential market, the project could be difficult to lease up within a traditional timeframe of 12 to 15 months. On the other hand, the project would likely be eligible for a Brownfield Tax Credit that could considerably offset expenses.

The scenario's feasibility can also be expected to increase over time. As the North Shore market for multifamily housing strengthens, and the areas around St. George and Stapleton continue to see strong investment in mixed-use waterfront development, increased demand can be expected in other North Shore neighborhoods including Port Richmond and Mariners Harbor. Regional precedents in Brooklyn and New Jersey illustrate the potential for mid-rise, multifamily residential development in waterfront districts as the market matures. For example, Harbor Pointe in Bayonne, New Jersey, opened in 2009 with 544 units; City

Lights in Bayonne opened in 2015 with 28 units; and The Oyster in Edgewater, New Jersey, opened in 2016 with 100 units. These projects show that multifamily housing in emerging markets can feasibly provide critical rental options for families with a diverse range of housing needs and household incomes.

Conclusion: While this vision is aspirational relative to the current market in Port Richmond, it offers a template for redevelopment that stands to make transformative community impacts. Beyond reconnecting Port Richmond to the waterfront, and potentially catalyzing the restoration of ferry connections to Manhattan, a project of this size would powerfully stimulate demand for retail in the surrounding neighborhood. This vision is also highly adaptable to other sites within the Mixed-Use Corridor subdistrict. For example, a large underutilized property immediately west of the strategic site, currently used for parking and storage, could accommodate a similar program with comparable community impacts. As the multifamily housing market matures on the North Shore, advance planning will be crucial to ensure that new development on large sites such as these appropriately supports the community's area-wide revitalization vision.

UNION AVENUE SITE

130 Union Avenue

A Community “HealthPort”

This partially vacant site in Mariners Harbor, an area in need of additional health services and low-income housing, is envisioned as a holistic health center and neighborhood anchor with clinical space, recreational facilities, and a cafe offering healthy food options. The program would also include townhome residential units, while a proposed height variance would allow four-story senior housing along Union Avenue.

Site Profile: The site consists of Tax Block 1226, Lot 57 and is bounded by Union Avenue to the east, Leyden Avenue to the south, Harbor Road to the west, and the North Shore Railroad right-of-way to the north. It is owned by 647-649 Washington Ave., LLC and was used for lumber company operations for at least five decades. Located in the Affordable Neighborhood subdistrict, the site is zoned for low-density residential (R3A). It is partially built, with a warehouse to the east along Union Avenue and a large asphalt lot to the west. Residential properties adjoin the lot to the south.

Environmental Assessment: Based on a review of Sanborn Maps, historical site use as a lumber yard and coal storage facility, along with the presence of active railroad operations, may have impacted soil, groundwater, and/or soil vapor. The site is listed in regulatory databases for a fuel oil spill. Numerous additional sites of environmental concern are located within a 400-foot buffer. Further investigation should be performed to determine if any of the recognized environmental concerns have adversely impacted the site’s environmental quality. As development or reuse of the property may be complicated by the presence or potential presence of contaminants, the site is recommended for a BOA nomination.



Fig. 75: Union Avenue Site Interior



EXISTING CONDITION

Redevelopment Vision: This site presents an opportunity to establish a new type of community anchor for Mariners Harbor. Working with local health provider Beacon Christian Community Health Center, the project team has developed a vision for a “HealthPort” that would provide health services and neighborhood facilities for a community in urgent need of additional public health assets. As previously noted, Mariners Harbor has been designated as the only medically underserved area in Staten Island. In response, Beacon opened in 2006 to holistically address residents’ physical, mental, emotional, and spiritual needs. Beacon is seeking to expand its services, offering the BOA team an opportunity to test a scenario for a new health center in Mariners Harbor.

In the same way that the region’s waterfront ports serve as destinations for maritime services and provide safe harbor, so this facility would be a port for community well-being. The scenario envisions a 35,000-square-foot facility sited along Union Avenue, close to existing S46/96 bus service. The site would include approximately 25,000 square feet of medical offices offering primary care and other medical and surgical specialties. The space would also potentially include a chapel, counseling spaces, and services to support behavioral health care. Nutrition facilities, including classrooms with live kitchen space, would provide food education.

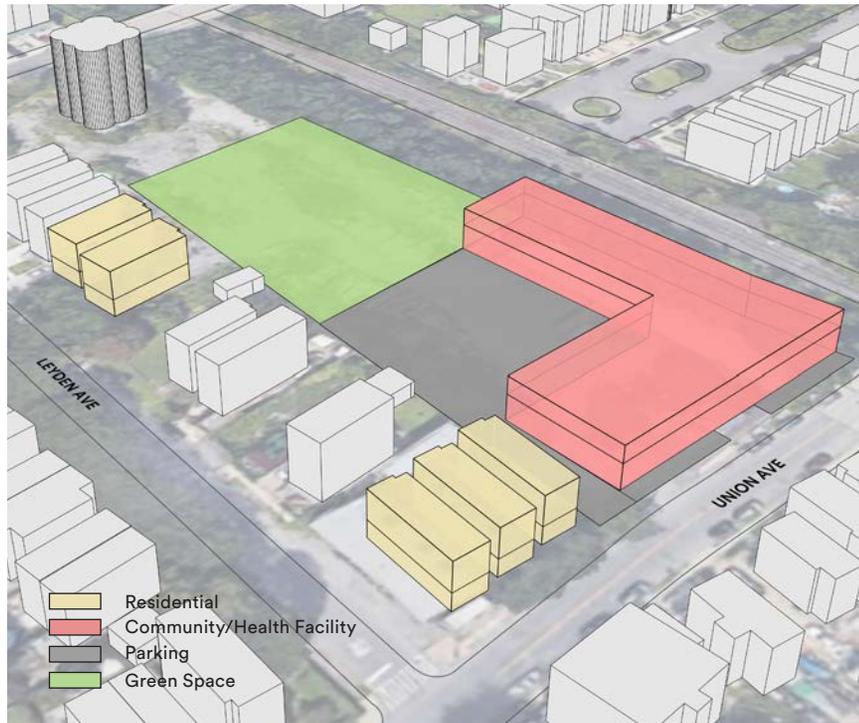
Medical space would be complemented by 10,000 square feet of community facilities. These areas would potentially include a gym for public use as well as for physical therapy,

SITE 4 KEYMAP

community meeting spaces, and a café that would serve healthy foods for a neighborhood whose eating options largely consist of fast-food restaurants. The café would also offer employment opportunities for the area’s low-income population, and become a community hub building social connections.

The program would also include housing on the site. Two housing typologies were explored. The first, as-of-right option proposes five, two-story rowhouses. Three rowhouses would be placed on the site’s southeast corner, with two additional rowhouses adjacent to existing housing on Leyden Avenue. Fifteen residential parking spaces would be provided, accessed from Union Avenue. The second housing option would require a height variance to accommodate a four-story, 45-foot-tall building at

AS-OF-RIGHT SCENARIO WITH ROWHOUSES



HEIGHT-VARIANCE SCENARIO WITH SENIOR HOUSING



| | |
|---|---------------|
| Zoning | R3A |
| Max. Commercial FAR | 1 |
| Max. Residential FAR | 0.5 |
| Lot Area (SF) | 78,221 |
| Max Building Height (FT) | 35 |
| ZSF | 78,221 |
| GSF | 45,500 |
| Proposed Community Facility GSF | 35,000 |
| Proposed Residential GSF | 10,500 |
| Proposed Residential Units | 5 |
| Total Parking Spaces | 67 |
| | |
| Total Development Costs (Incl. Acquisition) | \$28,120,000 |
| Potential Value of Brownfield Tax Credits | (\$2,500,000) |
| Development Costs After Tax Credits | \$25,620,000 |
| | |
| Project Gap | (\$2,970,000) |
| Project Gap per Built SF | (\$62.53) |

| | |
|---|---------------|
| Zoning | R3A |
| Max. Commercial FAR | 1 |
| Max. Residential FAR | 0.5 |
| Lot Area (SF) | 78,221 |
| Max Building Height (FT) | 45 |
| ZSF | 78,221 |
| GSF | 55,500 |
| Proposed Community Facility GSF | 35,000 |
| Proposed Residential GSF | 20,500 |
| Proposed Residential Units | 18 |
| Total Parking Spaces | 102 |
| | |
| Total Development Costs (Incl. Acquisition) | \$31,420,000 |
| Potential Value of Brownfield Tax Credits | (\$2,600,000) |
| Development Costs After Tax Credits | \$28,820,000 |
| | |
| Project Gap | (\$4,450,000) |
| Project Gap per Built SF | (\$79.46) |



Fig. 76: Left: Silos Viewed from Leyden Avenue; Right: NYCHA Housing at Grandview Avenue

the corner of Union and Leyden Avenues. This mixed-use building would offer ground-floor medical or community space, with the upper stories providing housing to serve the area’s growing senior population. Two two-story rowhouses would be constructed further west on Leyden Avenue. This option would provide 18 residential units, with 32 residential parking spaces.

The large site offers an opportunity to contribute to community open space needs. Its western portion could include exercise or playground facilities with potential access from both Union and Leyden Avenues. An opportunity also exists to extend this open space to Harbor Road on the west through two adjoining tax lots owned by the same property owner. These lots are vacant with the exception of abandoned silos likely dat-

ing to the property’s use as a coal-storage facility. The silos could be rehabilitated as industrial artifacts, and this portion of the site opened to public access.

Financial Feasibility Analysis: Both options for this redevelopment scenario carry a funding gap, with a larger gap for the height-variance scenario. The project’s feasibility could be enhanced through potential resources including New Markets Tax Credits, New York State funding programs through the Regional Economic Development Council Consolidated Funding Application, programs of the NYC Industrial Development Agency, and philanthropic contributions. Use of the Brownfield Tax Credit Program could also offset expenses, with an additional bump-up available due to the site’s location within an En-Zone.

Conclusion: Given the neighborhood’s public health needs, the HealthPort presents an ideal use in this subdistrict and could be adapted to potential sites throughout the area. The location on Union Avenue, as well as other sites along Davidson Street or near South Avenue, offer unique opportunities for a community health center. This part of Mariners Harbor has no central gathering place that would strengthen social, cultural, and economic infrastructure. Adjacent to the North Shore Railroad right-of-way, the subdistrict stands to benefit from future transit connections should the right-of-way be reactivated for transit service. In addition, proximity to the New York City Housing Authority complex between Lockman and Grandview Avenues offers convenient access for this large population that would benefit from health services.

A recommended rezoning of the subdistrict’s manufacturing zone to permit mixed-use development would further provide for the synergistic creation of new housing, retail, and community facilities to support the South Avenue commercial corridor while creating a dynamic new center for Mariners Harbor.

HARBOR ROAD PIER

3001 Richmond Terrace

A Harbor School for the North Shore

Located on an underutilized waterfront site, this scenario would provide education and training programs that leverage access to the Kill Van Kull and support job generation among the North Shore's maritime industries. Modeled on the Harbor School, which provides career and technical education to high-school students, the facility would also train adults seeking access to high-quality maritime jobs.



Fig. 77: Harbor Road Pier Site Viewed from Richmond Terrace

Site Profile: This 2.2-acre site in the Working Waterfront subdistrict, zoned for high-intensity industrial use (M3-1), consists of Tax Block 1206, Lot 23. The site is bounded by Harbor Road to the west, Richmond Terrace to the south, the Kill Van Kull channel to the north, and an undeveloped lot to the east. The property is owned by RCA Richmond Terrace LLC and has historically been used as a lumber yard and leasing facility. The site is partially built, with a warehouse to the east and a large undeveloped lot to the north. An adjacent two-story building on a separately owned tax lot at the corner of Richmond Terrace and Harbor Road is occupied by a small restaurant and residential dwellings.

Environmental Assessment: Based on a review of Sanborn Maps, the site's historical use as a lumber yard may have impacted soil, groundwater, and/or soil vapor, especially if wood preservatives such as creosote were used. Surrounding properties have been associated with numerous environmental concerns including a 16,192-gallon spill of #6 oil, which affected surface water, and a tank failure which resulted in the release of 50,000 gallons of a mixture of #6 oil and waste oil from a sunken barge. The historical site use and extensive spill history associated with surrounding properties may



EXISTING CONDITION

have adversely impacted the environmental quality of the site. Further investigation is suggested to determine the extent of potential environmental impacts. As redevelopment may be complicated by environmental impacts, the site is recommended for a BOA nomination.

Redevelopment Vision: This site, in the heart of Mariners Harbor’s industrial zone, presents challenges for reactivation in keeping with the Working Waterfront sub-district’s goal to support maritime jobs. Like similar sites along the BOA area waterfront, the property lacks sufficient deep-water access that would permit use by ship repair, towing, or related businesses. Its shoreline does not contain a bulkhead, pier to deeper water, or associated improvements that would be necessary to make it viable

for intense maritime use. Due to previously discussed regulatory barriers and major investments needed to upgrade shoreline infrastructure, reuse of this site by a water-dependent maritime business is unlikely.

Consequently, the BOA team, in consultation with the Steering Committee and maritime stakeholders, has proposed a program of maritime education and workforce training that would leverage the site’s proximity to some of the North Shore’s most important maritime employers. Such a use would benefit from waterfront access, but without requiring extensive investments to infrastructure or inducing significant additional truck traffic within the neighborhood. The proposed redevelopment scenario envisions a 35,000-square-foot educational facility and a 20,000-square-foot light industrial



SITE 5 KEYMAP

space that would support maritime workforce training initiatives. These uses would be located in a four-story building extending from Richmond Terrace toward the waterfront, stepping down in height to three stories and then two before terminating at a large open space where the property meets the Kill Van Kull. Given the size of comparable educational facilities, the program could accommodate an estimated 365 students.

This vision has been inspired in part by the Harbor School, which opened on Governors Island in 2010 and currently serves 520 students. Its diverse maritime career and technical education programs include vessel operations, professional scuba diving, marine policy, marine biology, marine systems technology, and ocean engineering. A number of specialized facilities support

EDUCATION AND WORKFORCE TRAINING SCENARIO



| | |
|--|---------------|
| Zoning | M3-1 |
| Max. Manufacturing FAR | 2 |
| Lot Area (SF) | 95,832 |
| Max Building Height (FT) | 60 |
| ZSF | 191,664 |
| GSF | 55,000 |
| Proposed Workforce GSF | 20,000 |
| Proposed Educational GSF | 35,000 |
| Min. Accessory Parking | 55 |
| Proposed Parking Spaces | 65 |
| Total Development Costs (Incl. Acquisition) | \$29,640,000 |
| Potential Value of Brownfield Tax Credits | (\$2,950,000) |
| Development Costs After Tax Credits | \$26,690,000 |
| Project Gap | (\$2,700,000) |
| Project Gap per Built SF | (\$49.09) |

the school's mission, such as an electronic bridge simulator, boat building workshop, and welding shop. The school receives 900 applicants each year for 140 seats, suggesting high demand for its programs. Such interest reflects an increased emphasis on career and technical education as a national priority. Given a surging need for engineers and technology innovators, the Harbor School's students reportedly enjoy strong career opportunities, whether destined for college or moving directly into the field.

Representatives of the BOA area's maritime businesses have cited a lack of qualified personnel on the North Shore who can perform the range of needs required for their operations. Even though jobs in marine-related industries have declined over the

last decade within the BOA area, current and future initiatives suggest that citywide maritime job opportunities may increase in the coming years. These initiatives include:

Job training opportunities for the emerging offshore wind industry. Wind power developers and federal energy planners have long seen the New York region as an ideal location for developing wind farms, and the state has set a goal of 2,400 megawatts of offshore wind by 2030. Fabrication and service of these facilities offers considerable employment opportunities for the sector.

Reactivation of the South Brooklyn Marine Terminal. In 2018, New York City announced plans to reactivate the South Brooklyn Marine Terminal as a major shipping hub, bring-

ing new industrial uses and 250 jobs to the South Brooklyn waterfront including waste paper recycling and export, import cargoes of lumber, salt, and aggregate material, and container-on-barge operations.

Freight NYC. New York City's freight volumes are projected to increase each year, reaching 312 million tons by 2045, a 58% increase over the 2016 volume. The city's \$100 million Freight NYC plan responds to this need by making strategic investments to modernize maritime and rail assets and create new distribution facilities.

A future regional barge network. In 2018, the Port Authority of New York and New Jersey and NYCEDC took initial steps to establish a regional barge network that would

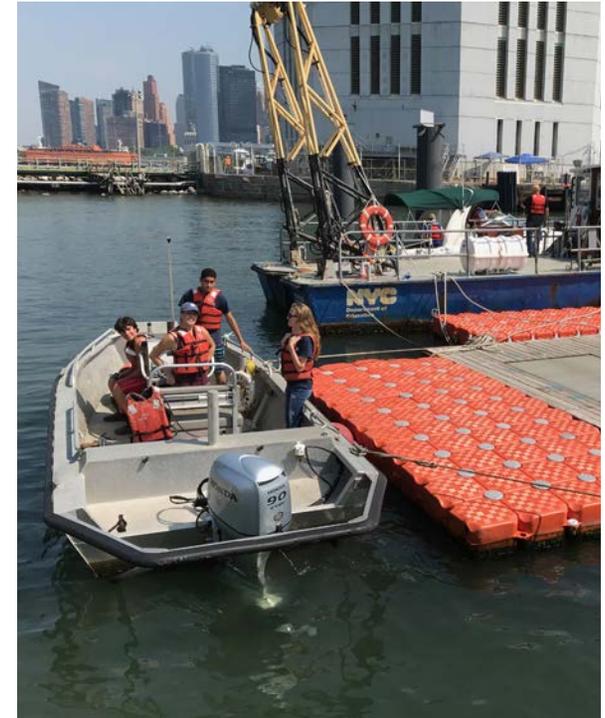
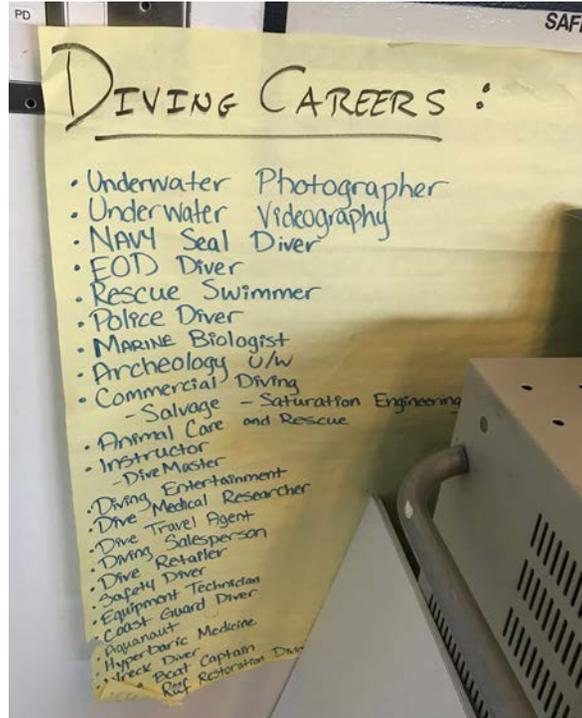


Fig. 78: Scenes from the Harbor School: Oyster Setting Tank; Diving Career Opportunities; Preparing for an On-Water Assignment

foster the use of barge services to move goods in the metropolitan region, offsetting the use of trucks carrying freight to and from the Port of New York and New Jersey.

Financial Feasibility Analysis: Development of an educational facility as described here would require a subsidy for construction, which increases when factoring in land acquisition costs. This funding gap could be reduced through a range of subsidy programs, including New Markets Tax Credits, New York State's Regional Economic Development Council Consolidated Funding Application programs, and philanthropic contributions. A number of potentially applicable programs are highlighted in Figure 68.

Conclusion: This redevelopment vision promises to support the employment needs of the BOA area's maritime businesses while connecting local residents to quality maritime jobs. The proposed site has distinct advantages for such a program. Located directly south of Shooters Island, it is protected from the channel's busy shipping traffic. Nearby Mariners Marsh Park and Arlington Marsh offer opportunities for environmental education as part of the school curriculum. Proximity to May Ship Repair, directly west of the site, could offer potential collaboration with an active maritime business. Lastly, the publicly owned street-end at Harbor Road could be integrated into the site's open space, allowing public access to potential waterfront amenities on the site.

Realizing this vision will require a more comprehensive understanding of needs and gaps in workforce training among maritime businesses. As a first step, a taxonomy should be created of maritime-sector jobs across the region—from welding to logistics to piloting—as well as their educational requirements. Further consultation with public agencies and region-wide education providers would add additional insights to refine the program structure. Development of the school would also benefit from collaboration with institutions providing strong career and technical education tracks such as the Harbor School and local schools such as Ralph R. McKee Career and Technical Education High School, Staten Island Technical High School, and the Harbor View School.

WALKER STREET DISTRICT

351 Walker Street

A Hub for Creative Industry

This manufacturing district is a significant employment center, yet offers a powerful opportunity to attract more jobs while being a better neighbor. Block-level improvements and investments can minimize community impacts—including shifting truck parking from Lake Avenue to the site’s interior—while providing workspace and studio tools to attract creative industrial tenants.



Fig. 79: Walker Street Site and Context

Site Profile: This site includes seven separate tax lots largely under separate ownership and encompassing nearly 11 acres. Zoned for high-intensity manufacturing (M3-1), and within the Creative Industry sub-district, this assemblage of industrial properties is bounded by Lake Avenue, Granite Avenue, Walker Street, and the North Shore Railroad right-of-way. The area contains a range of industrial tenants including food distributors, automotive uses, warehouse and storage facilities, and a large plumbing supplier. An adjacent tax lot contains an Eden II educational facility serving children with autism. The block includes a 4-story commercial warehouse, smaller warehouse and storage structures, and a large interior paved area used for parking and storage.

Environmental Assessment: Based on a review of Sanborn Maps, these sites and adjacent properties have included historical uses as a cement warehouse, manufacturing warehouse, oxidizing buildings, linoleum works, a copper shop, and an auto shop. A review of regulatory databases shows these properties to have environmental concerns including a liquid sealer spill. The properties’ historic operations, as well as contaminants cited in regulatory listings, may have adversely impacted environmental quality, including soil, groundwater, and soil vapor.



EXISTING CONDITION

Further investigation is suggested to assess environmental impacts of the above-identified concerns. Because development or reuse of the site may be complicated by the presence or potential presence of contaminants, the site is recommended for a BOA nomination.

Redevelopment Vision: This cluster of industrial businesses is a significant industrial employment center—with 182 reported employees—but it has opportunities to attract more jobs. For example, one of the site’s largest buildings, at 351 Walker Street, appears to be leased, though it employs only 23 people across 76,000 square feet of space. Moreover, as discussed in Section 3, the district generates conflicts with adjacent residential neighborhoods due to truck traffic associated with the present businesses.

This suggests an opportunity to better align the site’s uses and circulation with community needs. To address these opportunities, a series of block-level improvements and capital investments are envisioned to reinvent the area as a creative light-industrial district that would minimize community impacts and attract new business tenants.

As an overarching strategy, the district would be repositioned through a new, unified identity. A current lack of signage, disparate industrial uses, and poor site infrastructure would be addressed through a new district brand that would better position it to capture the growing need for creative industrial workspace.

A successful precedent for this type of commercial development is the Staten Island

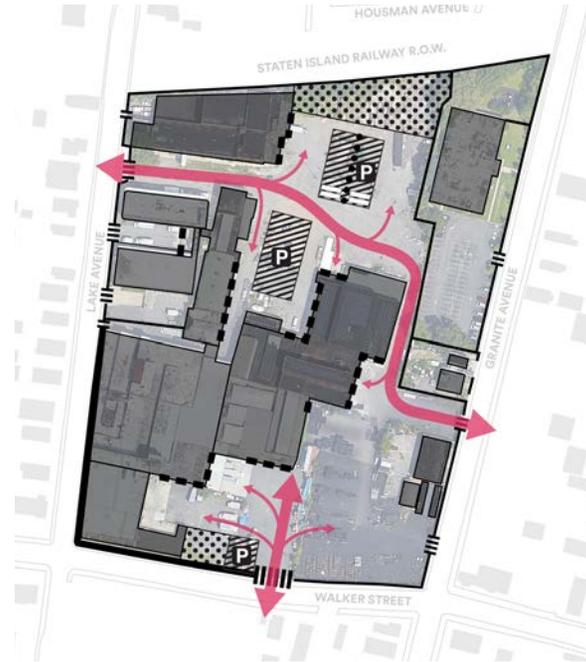
SITE 6 KEYMAP

Makerspace, opened in Stapleton in 2012. The 6,000-square-foot workspace provides studios and tools for artists, engineers, and other creative industrial occupations, as well as programming for local youth. Initial funding was provided through the New York City Economic Development Corporation and Futureworks NYC, a program to support advanced manufacturing in partnership with local businesses and educational centers. The Walker Street area’s rebranding as a creative district of this type—with cohesive signage, security, and gate system—would enhance its viability to attract creative tenants and leverage underutilized spaces. Other improvements would include shared worker amenities such as food truck parking and outdoor eating areas to create a sense of community among creative tenants. To improve transportation and minimize



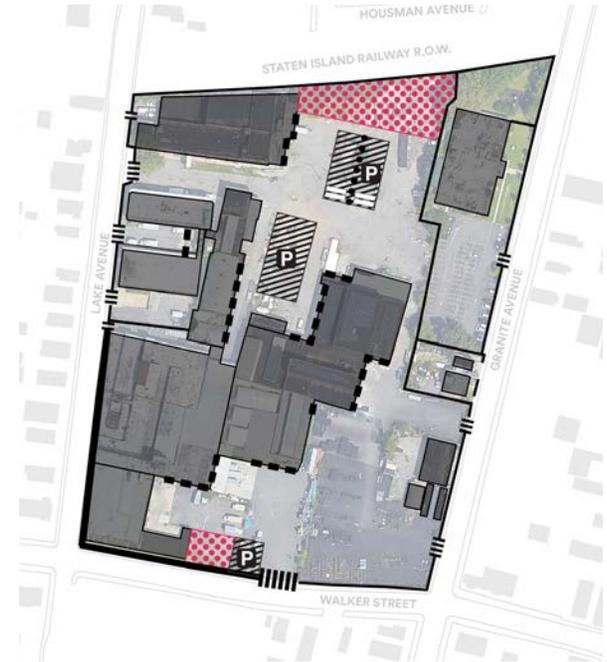
UNIFIED FENCING & GATING SYSTEM

- Single **district identity** with branded fencing & gate system
- **Industrial BID** purveyor
- Clear, **shared entry points** that optimize access/circulation
- Improved **district security**
- Improved **residential barrier**



NEW CIRCULATION ROUTE & THROUGH-SITE ACCESS

- **Redirect traffic off Lake Ave.** through shared entry/exit gate on Granite Ave.
- Improved **site circulation** with shared central loading area
- Explore **demolition of underutilized building(s)** dividing district



SHARED AMENITY AREAS & FOOD TRUCK PARKING

- Shared **worker amenity spaces** at both ends of the district area
- **Industrial BID** maintenance
- Additional **buffer area** for Eden school
- Amenity to drive **new creative businesses & tenant attraction**

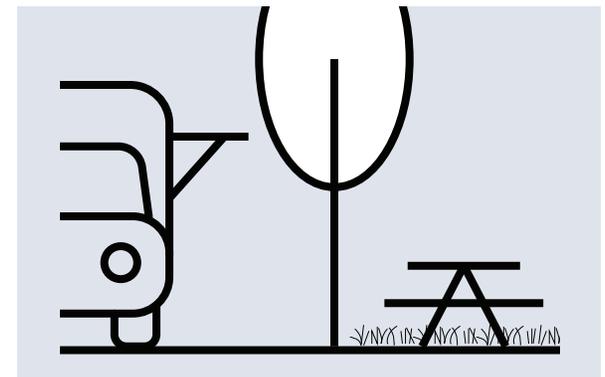
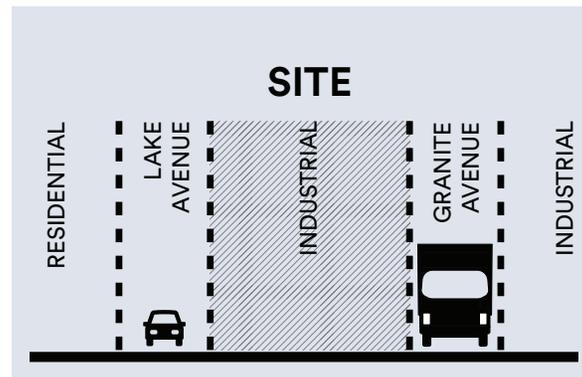
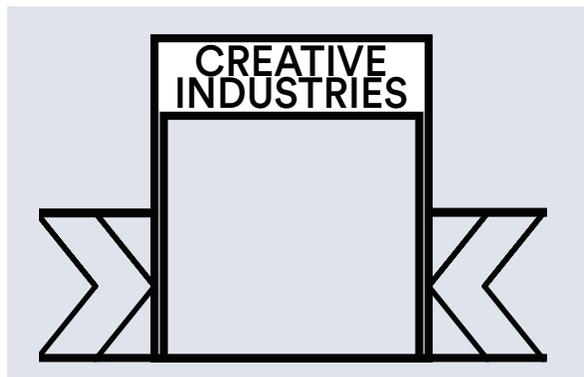




Fig. 80: Existing Structures within the Walker Street District

impacts on the surrounding neighborhood, traffic would be redirected off Lake Avenue by locating principal vehicle entry gates on Granite Avenue and Walker Street, both streets with more industrial character. Selective demolition of outmoded structures within the property would also allow greater use of the site's interior for loading and circulation, further reducing truck conges-

tion on adjoining streets. To reduce idling, electric standby infrastructure could provide an alternative clean energy source for trailer refrigerator units. Related improvements to reduce truck impacts include exploring one-way traffic on Lake Avenue, and adding left-turn directional signals in both directions at Walker Street and Morningstar Road.

Financial Feasibility Analysis: Support for block-level improvements within this district is complicated by the diverse ownership of businesses and tax lots. An ideal solution would be the creation of an overarching management entity such as a business improvement district that could help fund and coordinate site-wide investments and maintenance across the individual properties. To provide support for such investments, targeted funding is available at both the state and city level through low-cost financing options, credit enhancements, and capital support to subsidize new and renovated industrial spaces. Creative industrial uses can also leverage funding through additional tax incentives offered through the New York City Economic Development Corporation.

Conclusion: As New York City's economy continues to evolve from one grounded in heavy industry to one driven by technology and creative production, spaces that can accommodate the particular needs of the maker community will be in increasing demand. With other boroughs already growing too expensive for small creative businesses, Staten Island has an opportunity to repurpose some of its existing industrial building stock to house this burgeoning economic sector. The Creative Industry subdistrict has significant potential as a test case for turning existing underutilized assets into incubators for new ideas and positive community impacts. The future of the BOA area can be found in this dynamic interweaving of a unique place-based culture, creative economic development, and a strong focus on putting people and their needs at the heart of revitalization planning.

IV. FINAL RECOMMENDATIONS

The following recommendations expand and build upon the Phase One BOA Revitalization Plan to incorporate the entire study area including the neighborhoods of Port Richmond, Mariners Harbor, Elm Park, and Arlington. They encompass area-wide policies and revitalization strategies, as well as recommendations specific to subdistricts and strategic sites.

Although not the primary focus of the BOA study, climate resilience should be considered a key strategy for community revitalization. Ongoing New York City initiatives to bolster resiliency, as noted in studies and efforts including Vision 2020: New York City Comprehensive Waterfront Plan, Resilient Industry: Mitigation and Preparedness in the City's Industrial Floodplain, and One New York: The Plan for a Strong and Just City, will be instrumental in protecting the BOA community and ensuring that future development is appropriately designed to withstand climate events. Specific resiliency recommendations are discussed below.

Wherever possible, these recommendations include actions to be undertaken by both public and private-sector entities to advance community-supported goals. Whether carried forward through a BOA Step 3 Implementation Plan or through other state, local, and community initiatives, these recommendations offer a wide-ranging set of tools, strategies, and resources tailored to achieve the BOA community's vision for neighborhood revitalization.

SUPPORT & CREATE A VITAL LIVE-WORK NEIGHBORHOOD

1. Protect and strengthen existing neighborhood character.

- Protect Port Richmond Avenue's rich and authentic built context by preserving the street wall, height, and character of the study area's historic central corridor, while providing for new higher-density, community-enhancing development in appropriate locations, for example as shown in the Richmond Chandelier strategic site scenario.
- Investigate options for providing state tax credits to property owners for preserving, maintaining, and restoring historic buildings through New York State Historic Preservation Office historic district designation.

- Advocate for community benefit agreements and local hiring requirements to ensure existing residents and businesses benefit from any new public and private investment.

2. Expand and strengthen affordable, mixed-income, and mixed-use housing options in neighborhood centers.

- Target mixed-use areas for investment and development of new mixed-income housing opportunities: Leverage technical assistance grants from organizations including Smart Growth America and Leaders for Livable Communities to fund an additional neighborhood study that would identify blocks within the Mixed-Use Corridor and Affordable Neighborhood subdistricts which are appropriate for mixed-use development around future transit nodes.
- Advocate for a balance of diverse, active uses and services along Port Richmond Avenue to reinforce the corridor as a commercial and community center. For example, use NYS Main Street funding to support the redevelopment of vacant properties such as 97 Port Richmond Avenue to provide diverse new residential and commercial uses.
- Seek funding to conduct a study on the impact and concentration of supportive services in the study area.

3. Enhance the central commercial corridor and support neighborhood retail.

- Leverage public funding for neighborhood development and commercial revitalization studies such as EDA, Neighborhood 360°, and NYS Main Street grant programs to study opportunities to:
 - Invest in streetscape elements such as signs, lights, and street furniture to improve streetscape conditions on Port Richmond Avenue and at commercial nodes along Richmond Terrace.
 - Use marketing initiatives to encourage retail activity and strengthen commercial clusters on Port Richmond Avenue and Richmond Terrace.

4. Leverage new development to improve infrastructure, roads, and transit service.

- Work with the Borough President’s Office to coordinate interagency efforts to implement key intersection improvements and strategic widenings of Richmond Terrace.
- Advocate for new transit service opportunities in the BOA area, such as the reuse of the abandoned North Shore Railroad right-of-way for Bus Rapid Transit service, and work with NYCDOT to conduct a feasibility study for BRT service connecting the study area with St. George.
- As sites are redeveloped across the study area, support the integration of citywide stormwater management practices and tools such as bioswales, roof gardens, and other on-site stormwater detention facilities. In addition, work with NYCDEP to explore potential connections to the Staten Island Bluebelt to integrate the BOA area within this borough-wide stormwater management system.

5. Advocate for strategic rezonings to support new residential and retail development.

- Work with the Department of City Planning to rezone Port Richmond Avenue in order to expand the retail business corridor to the waterfront and Faber Park, including mixed-use development on underutilized sites on the northern end of Port Richmond Avenue.
- Rezone Port Richmond Avenue’s waterfront terminus for medium-density, mixed-use residential development and public open space along the waterfront east of the Bayonne Bridge. Ensure that public waterfront access requirements are built into any rezoning in this area.
- Rezone Port Richmond Avenue between Post Avenue and Rainbow Avenue to support mixed commercial and residential development and better connect retail destinations.
- Rezone the manufacturing district between Davidson and Roxbury streets in Mariners Harbor to accommodate new affordable and low-income housing and community facilities, including medical services, grocery stores, and other needed neighborhood services.

- As rezonings are proposed, advocate for infrastructure investments to serve existing and new residents including potential additional school seats, upgrades to wastewater treatment and sewage facilities, expansion of transportation networks, and other infrastructure needs.
- Work with NYCDEP to update the North Shore drainage plan and identify stormwater management needs as rezonings are proposed.
- Incorporate public waterfront access requirements into any new zoning regulations along Richmond Terrace.

CREATE QUALITY JOBS & WORKPLACES

1. Support the maritime industry.

- Work with the College of Staten Island to support maritime businesses by creating a center for maritime vocational and educational training along the Mariners Harbor waterfront, providing both secondary and workforce training to connect neighborhood residents to quality maritime jobs.
- Support the expansion of existing water-dependent uses and businesses along the industrial waterfront.
- Carefully consider the impact of brownfield redevelopment upon the area’s limited deep-water infrastructure, and support strategies to upgrade and enhance these critical maritime resources, including the following:
 - Improve maritime infrastructure by exploring ways to streamline regulatory hurdles that currently discourage redevelopment of maritime infrastructure.
 - Identify financial tools to encourage bulkhead upgrades, pier improvements, and floodproofing.
 - Identify off-shore areas of City-owned lots to expand available mooring space for maritime businesses and provide revenue for bulkhead improvements and open-space maintenance.

2. Allow new uses and job creation in appropriate locations.

- Leverage vertical development gap financing tools (e.g. the New York City Industrial and Commercial Abatement

Program and the Economic Development Fund) to encourage capital investments to attract new light manufacturing businesses and “creative district development,” aimed at maximizing local economic benefits and minimizing the negative impacts of heavier industrial uses such as truck traffic, noise, and air pollution.

- Provide opportunities for job creation on the West Shore by coordinating with the West Shore 2030 recommendations and exploring relocation options for non-water dependent and noncompatible uses in locations that allow for their expansion and provide better connections to the local highway network.
- Support and protect existing industrial businesses that provide employment and apprenticeship opportunities for the local community.
- Provide greater access to affordable healthcare by working with the Beacon Christian Community Health Center to develop a mixed-use health center in Mariners Harbor including medical services, training and community facilities, affordable senior housing, and the provision of fresh, healthy foods.

CREATE NEW CIVIC, CULTURAL, AND RECREATIONAL SPACES

1. Improve existing and create new public waterfront parks and destinations.

- Develop a destination open space along the waterfront at Port Richmond Avenue in conjunction with a rezoning permitting new mixed-use development that would provide high-quality public amenities while reconnecting residents and visitors to the Kill Van Kull.
- Explore options including the NYCDOT plaza program to close street ends at appropriate locations along the Port Richmond and Mariners Harbor waterfronts, such as Harbor Road, to provide visual access to the harbor and open space.
- Support the New York City Parks Department master planning process for Mariners / Arlington Marsh Park, seeking to restore natural habitats, revitalize wetland health, provide public access, and create recreational opportunities.

2. Coordinate with ongoing community efforts for a North Shore greenway.

- Coordinate Northfield Community LDC’s advocacy efforts with Community Board 1’s initiative to designate a multi-purpose pathway along the North Shore waterfront to develop a safe, walkable route along Richmond Terrace from St. George to Arlington.
- Create pedestrian and bike connections between existing and new parks on the North Shore by identifying funding and design options to advance greenway connections between Heritage Park, Port Richmond Avenue, Faber Park, Veterans Park, Mariners Marsh Park, Arlington Marsh, and the future Van Name Van Pelt Plaza.

3. Leverage the area’s unique arts and culture to support economic development.

- Capitalize on the BOA study area’s existing and underutilized cultural assets and encourage funding of arts initiatives, including the creation of a Port Richmond cultural district, opportunities for public art installations that activate the commercial corridor, and maritime-related interpretive projects.
- Advocate for cultural uses as part of the North Shore Railroad right-of-way’s future reuse, such as activating areas underneath the viaduct with public markets, art installations, food hubs, and other uses.
- Explore partnership opportunities between the cultural and business sectors to support tourism development, beautify streetscapes, build connections between community groups, enhance the district’s identity, and provide a greater sense of public life and cultural activity on Port Richmond Avenue.

IMPROVE CONNECTIONS & MOBILITY

1. Strengthen vehicular connections.

- Improve safety and traffic flow by identifying feasible options for use of the unbuilt mapped width of Richmond

Terrace for improvements in chronically congested areas, including the intersections of Jewett Avenue and Port Richmond Avenue.

- Work with NYCDOT to devise a traffic circulation plan to relieve traffic on Richmond Terrace and address impacts of any future development along the waterfront.

2. Increase safe pedestrian and bicycle connections.

- Work with NYCDOT to improve pedestrian safety along Port Richmond Avenue and Richmond Terrace by incorporating sidewalk improvements and new crossings into road improvements.
- Identify and implement improvements to the streetscape such as adding amenities like street trees, lighting, bus shelters, and street furniture to improve the pedestrian experience along the Port Richmond Avenue retail corridor.
- Add bicycle infrastructure to the transportation network by incorporating bike paths into road improvements and realignment plans for major thoroughfares. Add bicycle parking and shared bike stations at neighborhood centers and other destinations including Port Richmond Avenue, Faber Park, and community hubs such as the proposed health center at the Union Avenue strategic site.
- Implement traffic calming measures along Lake Avenue, and enforce truck traffic and idling regulations to mitigate negative impacts of conflicting uses within the study area.
- Leverage private rezonings and new development to include strategic streetscape improvements and other public amenities as sites are redeveloped.

3. Expand public transit options.

- Support the MTA's ongoing efforts to evaluate and enhance bus service on the North Shore.
- Identify funding sources to advance the reuse of the former North Shore Railroad right-of-way for public transit and other community-supporting uses.
- Explore potential fast ferry site options along the waterfront, including funding for a feasibility study for ferry service at Port Richmond Avenue.

- Support the introduction of new urban mobility options in the area such as Lime bikes, JUMP bikes, Zipcar, and other car sharing services.

ADDRESS ENVIRONMENTAL CHALLENGES

1. Identify challenges left by historic industrial use.

- Identify contamination issues on strategic sites by working with property owners, developers, and New York City, matching them to funding sources for Phase I and Phase II Environmental Site Assessments to determine if cleanup is necessary.

2. Clean up brownfield sites.

- Further analyze zoning tools and other programs to encourage redevelopment and remediation of North Shore sites. These tools include the En-Zone program, in which designated properties are eligible for additional tax credits through New York State's Brownfield Cleanup Program. Other tools include federal Opportunity Zones, increasing FAR to incentivize redevelopment, and modifying parking regulations to reduce redevelopment costs.
- Use strategic sites as catalysts for revitalization by working with property owners to develop properties in accordance with the BOA Revitalization Plan, and use the BOA designation's potential to leverage additional funding for cleanup of contaminated sites.
- Devise a marketing plan to attract investment to the area, leveraging the attractive new terms available under the federal Opportunity Zones program, which encourages long-term, private capital to invest in eligible low-income communities.

3. Prevent future contamination.

- Support New York City agencies in further adopting recommendations from the Open Industrial Uses study to encourage industrial businesses to be better neighbors.

4. Improve the North Shore's climate resilience.

- Encourage best practices to resist flooding and storm surge across the study area, including recommendations from DCP's Resilient Industry Study and the West Brighton BOA. These strategies include:
 - Elevating new waterfront developments such as the mixed-use project proposed for the strategic site at the northern end of Port Richmond Avenue to meet New York City flood-elevation guidelines.
 - Utilizing tools outlined in the Department of City Planning's Retrofitting Buildings for Flood Risk report, such as elevating mechanical and plumbing systems, electrical utilities, and other building system components; applying wet and dry floodproofing strategies; and converting lowest-level residential units to community facility uses to reduce residential flood vulnerability in ground-floor spaces.
 - Structurally repairing bulkheads that are in poor condition to improve drainage capacity and help protect against soil erosion and water seepage.
 - Coordinating with MTA to ensure that any future Bus Rapid Transit alignments are appropriately elevated to create a flood-resilient transportation corridor.
 - Supporting NYCDEP efforts to advance ongoing green infrastructure programs in the area, such as a proposal to expand the Bluebelt program to the North Shore.
- Support local resiliency planning to protect the health, safety, and welfare of vulnerable BOA residents and businesses. For example, New York City's 2013 plan A Stronger, More Resilient New York contains actionable recommendations for both rebuilding communities impacted by Hurricane Sandy and increasing the resilience of infrastructure and buildings citywide. The Phase One BOA report represented an effort to apply this plan's "resiliency toolkit" to the BOA area. Some of the plan's recommendations include:
 - Zoning changes to encourage retrofits of existing buildings and construction of new resilient buildings in the 100-year floodplain.
 - Initiatives to encourage existing buildings in the 100-year floodplain to adopt flood resiliency measures through an incentive program and targeted mandate.
 - A program to raise bulkheads and other shoreline structures in low-lying areas most at risk of flooding, including, potentially, areas of the North Shore.
 - Loans and grants to help New Yorkers make resiliency investments in their businesses, including a sales tax abatement program for owners of industrial buildings in the 100-year floodplain.
 - The establishment of Community Design Centers to assist property owners in developing design solutions for reconstruction and retrofitting, and connect them to available New York City programs.
 - Investments to promote community and economic recovery, including planned and on-going investments on the North Shore.
- Ensure that all new development within the BOA area is built to New York City's current resiliency standards.

V. PRIORITY NEXT STEPS FOR IMPLEMENTATION

The following section summarizes near-term actions, opportunities, and strategies to advance the BOA Revitalization Plan recommendations and support key neighborhood goals. As the North Shore's real-estate market matures over the coming years and provides new opportunities for investment within the BOA study area, these priority steps for implementation will help set the stage for community-supported redevelopment, ensuring that future growth is aligned with community priorities through advance planning and coordination among private and public-sector interests.

1. **Connect property owners, real-estate investors, developers, and other interested parties with strategic site redevelopment opportunities.**

Through targeted outreach, make potentially interested parties aware of BOA strategic site opportunities, particularly those sites with near-term redevelopment potential such as the Port Richmond Avenue Storefront, Richmond Chandelier, Union Avenue, and Harbor Road Pier sites. In addition, ensure that development partners are aware of available support for vertical development gap financing and technical assistance, including the following resources:

- **Industrial and Commercial Abatement Program:** Property tax abatements for up to 25 years are available for industrial and commercial buildings that are built, modernized, expanded, or otherwise physically improved. Properties must be improved by at least 30% of their assessed value to qualify for the abatement. Industrial properties improved by at least 40% of their assessed value are eligible for an additional abatement.
- **Economic Development Fund (EDF):** This statewide program provides assistance to ensure diverse business needs are being met. With a focus on economic activity generation and job creation, EDF funds assist with construction, expansion, and rehabilitation of facilities; acquisition of machinery and equipment; working capital; and the training of full-time permanent employees.

- **Metropolitan Economic Revitalization Fund:** Funding support is provided through loans (up to a maximum of \$5 million, or 10% of project costs) to improve land and/or buildings, as well as construction or renovation costs.
- **NYC Industrial Developer Fund:** Project financing for industrial real-estate development projects is provided through grants, low-interest subordinate loans, and guarantees on senior private loans.
- **New York State Energy Research and Development Authority (NYSERDA) New Construction Program:** Technical and finance support provides NYSERDA project managers and consultants to work with commercial building owners or tenants to analyze efficiency opportunities in new or renovated properties.
- **NYSERDA Small Commercial Energy Efficiency Program:** Energy assessment is available for small businesses and nonprofits to implement energy-efficient strategies.
- **New York State Division of Housing and Community Renewal Funding Opportunities:**
 - New Construction Capital Program (NCP)
 - Supportive Housing Opportunity Program (SHOP)
 - Senior Housing Program (SENIOR)
 - Public Housing Preservation Program (PHP)
 - Multifamily Preservation Program (MPP)
 - Rural and Urban Community Investment Fund (CIF)
 - Mitchell-Lama Program
 - State Low Income Housing Credit Program (SLIHC)
 - Federal Housing Trust Fund Program (Federal HTF)
 - Small Building Participation Loan Program

2. **Leverage New York State Main Street grants and other funding sources to continue redevelopment and revitalization of the Port Richmond Avenue commercial corridor.**

As properties along Port Richmond Avenue become available for redevelopment, continue to utilize Main Street funding to assist project sponsors in rehabilitation of existing properties or new construction that supports BOA area goals.