

CITY OF KINGSTON BROWNFIELD OPPORTUNITY AREA STEP 3 Final Implementation Plan J. Volume J

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PROJECT TEAM New York Department of State City of Kingston

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INTRODUCTION

This section provides a description of how, during the course of preparing the Hudson Riverport Vision Plan for the Kingston Waterfront Brownfield Opportunity Area (the Hudson Riverport Vision Plan or the BOA Plan), the requirements of the State Environmental Quality Review Act (SEQRA) have been fulfilled and complied with, including identifying specific conditions or criteria under which future actions will be undertaken or approved, including requirements for any subsequent SEQRA compliance.

The City of Kingston Common Council (the City) acting as Lead Agency pursuant to SEQRA and its implementing regulations (6 NYCRR Part 617) has prepared this combined Plan and Draft Generic Environmental Impact Statement (DGEIS) to support the adoption and implementation of the Hudson Riverport Vision Plan for the Kingston Waterfront Brownfield Opportunity Area (BOA). Adoption and implementation of the BOA Plan constitutes the "Project" or "Proposed Action" subject to SEQRA.

The required content for a Draft GEIS (per 6 NYCRR Part 617.9) is included in this section as well as other sections of the complete BOA Plan (which is comprised of both the Step 2 Nomination Study and Step 3 Implementation Strategy). Figure 08.1 describes how Draft GEIS content requirements are satisfied and where in the body of the Final BOA Plan specific content can be found. A list of additional underlying studies, reports and other information obtained and considered in preparing the GEIS is included at the end of this section.

FORMAT AND CONTENT

In accordance with the NYSDOS BOA Program Guidance, the DGEIS is incorporated into the body of the BOA Plan so they are one unified document. It is noted here that the BOA Plan consists of both the Step 2 Nomination Study and Step 3 Implementation Strategy. The Step 2 Nomination Study is included in Appendix C.

The environmental assessment herein has been prepared in general accordance with 6 NYCRR 617.10 (Generic Environmental Impact Statements), and as such will present a more general set of existing conditions and analyses than a conventional or project-specific Draft EIS. This assessment defines the Proposed Action in terms of potential projects identified in the BOA Plan and includes assessments of anticipated impacts commensurate to the level of detail available at this time. Due to the prospective nature of the BOA Plan, the analyses are based on conceptual plans and available information. Where no detail is available, qualitative estimations of impacts are provided, and where appropriate analyses are identified that should be required when future individual projects are proposed.

The general framework of this section provides:

- A conceptual description of the proposed action or project in the form of a series of future redevelopment projects.
- **2** A characterization of the environmental setting and existing conditions within the BOA study area.
- **3** An identification and assessment of the potential significant impacts that are likely to occur under implementation of the BOA Plan; and identification of possible mitigation measures to avoid or reduce their impacts.
- **4** An evaluation of alternatives to implementing the BOA Plan as presented (in Evaluation of Alternatives).
- 5 An identification of thresholds and criteria for additional review under SEQRA to address site-specific impacts that cannot adequately be addressed at this time in the conceptual level BOA Plan.

GEIS CONTENT REQUIREMENTS

Certain elements in other sections of the BOA Plan meet corresponding SEQRA required minimum content for a GEIS. This section relies heavily on the inventory and analysis prepared in the Step 2 Nomination Study and is augmented with information prepared for the extended BOA boundary, and new information which has been updated during preparation of the Step 3 Implementation Strategy. Figure 08.1 shows where SEQRA DGEIS content requirements are met by other sections of the BOA Plan.

GEIS TOPIC	DOCUMENT*	SECTION OR CORRESPONDING MAP	PAGE(S)
Description of Proposed Action	Step 2	Section 1 (Project Description and Boundary)	pp 21-22
(Project Description)	Step 3	Section 8 (Project Description [Proposed Action])	Vol III: pp 10-15
SEQRA Public Hearing	Step 3	Section 3 (Community Engagement)	Vol I: pp 22-27
Description of Environmental Setting	Step 3	Section 8 (Environmental Setting – Existing Conditions)	Vol III: pp 16-35
- Community and Regional Setting	Step 2	Section III A (Community and Regional Setting), Table 2, Map 1	pp 24, 42, 81
	Step 3	Section 4 (Background - Environmental Setting)	Vol I: pp 28-41
- Land Use, Ownership and	Step 2	Section III B (Inventory and Analysis) 1, -2, Table 1, Map 4, Map 5, C-3, Map 16, Appendix 3, 3.4	48-53, 99,100, 144
Zoning	Step 3	Section 7 (Implementation Strategy and Compliance)	Vol II: pp 86-134
- Brownfield, Abandoned and	Step 2	Section III C (Brownfield, Abandoned And Vacant Sites)	рр 79
vacant Sites	Step 3 Section 4 (Physical Context) Vol I: p	Vol I: pp 36-63	
- Strategic Sites	Step 2	Executive Summary H, -N, Section III C-2, -E-3, Map 15, Appendix 4	pp 9-11, 17, 87- 97, 115-116, 176
- Parks and Open Space	Step 2	Section III B (Inventory and Analysis) 4, -5, Map 7, Map 8	pp 56-60
- Cultural Resources (Historic Sites and Archeologically Sensitive	Step 2	Executive Summary J-5, O3b, Section III B-6, Map 9, Map 10	pp 12, 19, 60- 61, 64-65
Areas)	Step 3	Section 8 (SEQRA Compliance)	Vol III: pp 8-9
- Visual and Aesthetic Resources	Step 2	Executive Summary O3c, Section III B10g, -F6b	pp 19, 75-76, 130
- Transportation Facilities and	Step 2	Executive Summary J6, Section III (Inventory and Analysis) B7, E4, -5, Map 11, Appendix 3	pp 12, 66, 69, 116, 117, 144
Iramic	Step 3	Section 4 (Transportation and Access)	Vol I: pp 88-95
- Infrastructure and Utilities	Step 2	Executive Summary J2,-J3 Section III B9, B10, Map 12	pp 11-12, 70-72, 74
	Step 3	Section 4 (Infrastructure)	Vol I: pp 96-99
- Existing Natural Resources and	Step 2	Section III (Inventory and Analysis) B10, C1b, Map 13, Map 14	pp 73, 77, 78, 81-84
Environmental Features	Step 3	Section 8 (Existing Conditions)	Vol III: pp 16-35
- Existing Economic Conditions	Step 2	Executive Summary K, Section III D	pp 13-14, 101- 112
	Step 3	Section 4 (Economic Context)	Vol I: pp 64-85
Impact Assessment and Mitigation	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 36

FIGURE 08.1 Index of GEIS contents

- Impacts on Land Use and Community	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 36-38
- Impacts on Natural Resources	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 38-41
-Impacts on Cultural Resources	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 42
- Visual and Aesthetic Impacts	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 43-47
- Open Space and Recreation	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 48
-Transportation Impacts	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 49
- Infrastructure and Utilities	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 50-52
- Impacts from Contamination	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 52-55
Consistency with NYS Coastal Policies	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Appendix A
Temporary and Short-term Impacts	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 55-57
Unavoidable Environmental	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 57
Commitment of Resources	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 57-58
Growth-Inducing Aspects	Step 3	Section 8 (Assessment and Mitigation Measures for Potential Significant Adverse Impacts)	Vol III: pp 58-59
Alternatives	Step 3	Section 8 (Evaluation of Alternatives)	Vol III: pp 60-63
Thresholds for Future Review under SEQRA	Step 3	Section 8 (Thresholds for Future Review and Conditions for Future Actions)	Vol III: pp 64-65
References and Underlying Studies	Step 3	Section 8 (DGEIS References)	Vol III: pp 66

* Step 2 – City of Kingston, NY Waterfront Brownfield Opportunity Area, Step 2 Nomination, August 19, 2010 and Step 3 – City of Kingston the BOA Plan Sections 1-8, Draft September 2015

SEQRA PROCESS

Prior to commencing the environmental impact review process for the Project, the City conducted a series of procedural steps in accordance with SEQRA and its implementing regulations. This section provides a description of the those steps and procedures taken to comply with SEQRA while developing the BOA Plan, including the completed Environmental Assessment Form (EAF) (Appendix A) Parts 1 and 2; the Coordinated Review/Lead Agency Designation process; and the Determination of Significance – Positive Declaration.

ENVIRONMENTAL ASSESSMENT FORM

In December 2014 the City completed Parts 1 and 2 of the Full EAF and classified the Project as a Type 1 Action under SEQRA. The Project is considered a Type 1 Action because it is anticipated to:

- Involve adoption of the BOA Plan with prescribed land use components and/or recommendations for zoning changes to 25 or more acres;
- Involve the physical alteration of 10 acres of land or more;
- Involve Unlisted Actions within an area substantially contiguous to a National Registerlisted historic resources; and
- Involve publicly owned parkland (Kingston Point Park, TR Gallo Park and Block Park).

COORDINATED REVIEW/LEAD AGENCY DESIGNATION

Upon completion of the EAF and classification of the Project as a Type 1 Action (in accordance with 6 NYCRR 617.4), the City passed a resolution on January 6, 2015 proposing to seek SEQRA Lead Agency status for the adoption and implementation of the BOA Plan, and indicated its intent to conduct a Coordinated Review by requesting the consent from the other potentially Involved Agencies to the City serving as SEQRA Lead Agency.

The following Involved Agencies will be required to approve and/or adopt the BOA Plan:

- City of Kingston Common Council;
- City of Kingston Heritage Area Commission;
- New York State Department of State, and
- New York State Department of Environmental Conservation.

Potential future involved agencies that may have a permit, approval and/or funding role regarding implementation of the BOA Plan include:

- City of Kingston Planning Board;
- City of Kingston Zoning Board of Appeals;
- City of Kingston Local Development Corporation;
- Hudson Valley Greenway;
- New York State Department of Transportation;
- New York State Office of Parks, Recreation and Historic Preservation;

- State Historic Preservation Office (SHPO);
- Ulster County Planning Board;
- Ulster County Department of Public Works;
- · Ulster County Industrial Development Agency, and
- Ulster County Transportation Council.

POSITIVE DECLARATION

On February 10, 2015 upon receiving no objections from potentially Involved Agencies, the City assumed the designation as Lead Agency for the Project. The City's resolution also indicated the City determined that a DGEIS would be prepared. A notice for the public scoping meeting was distributed to involved agencies and published in the Environmental Notice Bulletin and local newspaper.

SCOPING

On February 24, 2015 a Public Scoping session was held in the Kingston City Hall. Scoping was held in conjunction with a public meeting to gather input on visioning for the redevelopment of the BOA (the Hudson Riverport Vision). Comments received during the scoping meeting and in writing (through March 10, 2015) that were relevant to the preparation of the DGEIS were summarized and are presented along with the Final Scope.

PUBLIC HEARING

A public hearing (in accordance with NYCRR §617.9(a)(4)) was held on November 12, 2015 as part of the community engagement activities for the BOA Plan.

RATIONALE FOR GENERIC EIS

The City determined that a Generic Environmental Impact Statement (GEIS) rather than a project-specific or conventional EIS is particularly well suited for the Project because the BOA Plan:

- represents a number of separate actions within the BOA study area, which if considered singly, may have minor impacts, but when considered together may have significant impacts; and
- is an entire program or plan having wide application that may have new or significant changes to affecting the range of future policies, projects and changes to land use, zoning or development plans.

For purposes of the BOA program, writing the BOA Plan to serve as the GEIS is an appropriate vehicle for SEQRA compliance. A GEIS offers several advantages for a BOA project such as setting forth specific conditions or criteria under which future actions will be taken or approved, including requirements for any subsequent SEQRA compliance. This may include criteria for Supplemental EIS(s) to reflect site-specific impacts from future projects that could not be adequately addressed in the GEIS at this time.

PROJECT DESCRIPTION

The Proposed Action subject to SEQRA is the intended adoption and implementation of the Hudson Riverport Vision Plan for the Kingston Waterfront BOA. This section summarizes the conceptual redevelopment plans presented in the BOA Plan, which satisfies the SEQRA requirements in NYCRR §617.9(b)(5)(i). Additional detail describing the proposed development plan is found in Section 6.

The BOA Plan guides revitalization and redevelopment of the approximately 190-acre BOA (land area), including possible remediation of several strategic brownfield sites adjacent to the Hudson River and Rondout Creek waterfronts, public parkland (Block Park and Kingston Point Park), residential areas, commercial and public facilities. The purpose of the BOA Plan is to build upon the Local Waterfront Implementation Plan (2002) and proposed City of Kingston Comprehensive Plan (2015) to create redevelopment opportunities on former industrial brownfields. The BOA is generally bounded by the waterfront along Rondout Creek from Island Dock to its confluence with the Hudson River at Kingston Point, generally south of Abeel Street and East Strand Street.

PROPOSED EXPANSION OF BOA BOUNDARY

During Step 3 the City determined to expand the BOA boundary to better take advantage of additional brownfield sites whose redevelopment would serve as catalyst projects for the revitalization of the greater BOA. The proposed expanded area includes 12 parcels, approximately 23.6 acres (including water area) at the east end of the BOA.

All the parcels within the proposed extended BOA boundary are located either on Rondout Creek or front on Abeel Street. The subject area is bounded at the west by the former Block Plant property on Abeel Street. Abeel Street bounds the subject parcels to the north from the former Block Plant Site at the west to its east end at 144 Abeel Street (abutting the current BOA boundary). Rondout Creek serves as the southern bounds of the proposed extension of the BOA boundary. The subject parcels have been grouped into five areas based on common ownership or existing use. Figure 04.4 in Chapter 4 lists the parcels within the proposed extended boundary, which are also depicted on Figure 04.3.

JUSTIFICATION FOR THE PROPOSED CHANGE TO BOA BOUNDARY

The proposed area for the BOA boundary extension is an organic extension of the BOA originally studied in Step 2. Each of the five groupings offers unique opportunities for brownfield redevelopment. The expansion area includes a group of vacant and underutilized properties previously studied and cleared for redevelopment (the Noah Hotel Site – sites 1-5). The Hideaway Marina is an existing water-dependent business with excellent access, no major environmental issues and several ancillary buildings. The P&T Surplus property (sites 8 and 9) is an underutilized property that does not have significant contamination concerns based on a Phase I Environmental Site Assessment does not have significant contamination concerns. Site 12 includes the former Block Plant. The former Block Plant and associated parcels (sites 11 and 12) are part of the same holdings as Island Dock, which has significant potential for redevelopment as a water-dependent site. The

available environmental site assessments indicated there is low to moderate potential for degraded environmental conditions.

Taken together, the 12 subject parcels make a reasonable extension to the Kingston Waterfront BOA that would incorporate the entire slipway on Rondout Creek up to and including the causeway. Site Profiles have been prepared for each of the five groupings of parcels within the proposed extended BOA boundary and are provided in Section 4 (Site Profiles). It is noted that several narratives in Step 2 Nomination Study refer to Block Park, even though it was not included within the original BOA boundary.

HUDSON RIVERPORT VISON PLAN - STRATEGIC SITES

The Step 2 Nomination Study (Section III.E.5) (Proposed Waterfront Land Uses) describes the preferred future land uses identified at that time. Step 2 also presented a conceptual land use plan graphically on a figure titled Kingston Waterfront Development Implementation Plan. However, since completion of the Step 2 Nomination Study, the Steering Committee has taken further steps to refine and detail the future plan, resulting in the Hudson Riverport Vision Plan. The Design Strategy in Section 6 provides greater detail on anticipated land uses along the entire BOA corridor as well as for each of the five selected strategic sites, which are summarized in this section.

Based on information gathered and analyzed, priority sites having the greatest redevelopment potential and the least environmental constraints were identified in Step 2 and refined in Step 3. Strategic brownfield sites were chosen for their: overall importance to the community and the revitalization effort; location; ownership and owner willingness to redevelop; on-site structures; level of known of potential contamination; property size and capacity for redevelopment; potential to spur additional economic development or positive change in the community; potential to improve quality of life or to site new public amenities; community support for proposed projects for the site; and adequacy of supporting or nearby infrastructure, utilities and transportation systems. In the Step 2 document in Map 15 (Strategic Sites) the original strategic sites are shown, which have been expanded to include the Block Park / Island Dock site and the Noah Hotel Site. The revised Strategic Sites are shown in this Step 3 BOA in Section 6.

The Strategic Sites include:

KOSCO ASSEMBLAGE

This waterfront site is 4.1 acres located on the south side of East Strand. It is currently used by local artisans as well as the NY State Police, Ulster County Sheriff's Department and NY DEC to dock emergency response vessels. Two new development sites can be created outside of the flood plain. Each building will be mixed-use with retail space at the ground floor and residential above. Buildings range from three to four stories and provide a range of unit types including market rate, senior housing, artist lofts and affordable units.

The total preferred long-term development will be 60,000 square feet of commercial space including 38 residential units.

THE LANDING

Kingston Landing is a 3.8 acre site of vacant land and marshland located at the mouth of the Rondout Creek. The site has 215 feet of frontage along the east side of North Street. There is a boat launch ramp to Rondout Creek at the southwest corner of the property. Approximately half of the parcel is submerged at high tide.

The BOA Plan recommends reuse of the Landing property as a destination project that will take advantage of its prominent location, such as a restaurant, retail and cultural uses. The proposed development on the site will be a focused single two to three story building that creates a mixed-use trolley terminal with retail and cultural space. This trolley stop will become the major hub for the eco-hotel destination (at Millens property) and will provide opportunities to access the waterfront, day-liner trail and the lighthouse trail.

The total long-term development for this preferred option is 55,000 SF of mixed-use commercial and entertainment space.

MILLENS & SON SCRAP METAL RECYCLING

The Millens & Son Scrap Metal Recycling site (Millens site) is a 2.2 acre site located on the north side of East Strand Street. The site includes a small brick and concrete block structure built at the front of the parcel that is currently used for vehicle and equipment maintenance and storage.

The preferred option will be to combine the site with adjoining properties to create a destination 40 key eco-hotel site. These sites include private and public lands that primarily consist of condemned houses that have sustained flood damage beyond repair. The hotel will be a one to two story single structure that will house common facilities such as check-in, restaurant, meeting space, offices, and back-of-house services. The guest rooms would be small bungalows sited along the boardwalk.

The total long-term development for this preferred option is 35,000 square feet of commercial space and the 40 hotel units.

BLOCK PARK/ ISLAND DOCK

This strategic site includes both Block Park and Island Dock. Block Park is a 7-acre site located between Abeel and Ravine Streets and the inner channel of Rondout Creek from Island Dock. Block Park is currently a City operated public park and includes a softball diamond, basketball courts, handball courts, a pavilion, picnic area, playground and restrooms. Island Dock is a privately owned 17-acre manmade island. Currently, the island is heavily vegetated and is under-utilized.

The preferred option would be that Island Dock (approximately 17 acres of uniquely scenic undeveloped land with 6500 running feet of vessel accessible waterfront perimeter) be purchased by the City of Kingston, possibly with the participation and/or assistance of an intermediate entity or entities, to be developed for public usage. A possible sale of Block Park (approximately 7 acres) by the City of Kingston to a private developer might generate some of the necessary funding for such an acquisition. The Block Park parcel will be primarily a residential development with ground floor retail opportunities in the eastern-most buildings.

The Greenline (described in Section 6) will extend from Ravine Street, west along the water, to the Island Dock entrance. There could also be a network of pedestrian walkways. The existing softball diamond in Block Park could be relocated to the southwest corner of the parcel. A parking lot could be located adjacent to the softball diamond at the site of the former Block Plant. A small amphitheater could be located at the eastern tip of the island to provide a venue for musical and theater performances and/or outdoor movies. A pedestrian bridge could connect the Island to Hone Street on the mainland. The bridge would be elevated to allow the passage of boats.

The total long-term development of the preferred option is 538,000 SF of residential (321 units) and retail as well as open space and recreation facilities.

NOAH HOTEL SITE

The proposed Noah Hotel site is situated between Abeel Street and West Strand Street. The proposed hotel will have frontage and access on both the upper level (Abeel Street) and West Strand to capture the traffic from the waterfront promenade. The site would offer retail for recreational boaters and a restaurant overlooking Rondout Creek. An additional two to four story commercial building will be co-located on the site to provide maritime focused office space and support industry. A series of public terraced landscape space will be located between the two buildings to create a green connection between the upper and lower levels. Parking will be incorporated for the hotel guests which could also offer a larger district-wide parking strategy option by providing a municipal garage with parking designed into the hillside.

The total long-term development for the preferred option will be 272,500 square feet of mixed retail, office and marine support services, and includes a 150 key hotel.

POTENTIAL PROJECT ACTIVITIES

Based on the Design Strategy, the revitalization of the Kingston Waterfront BOA will primarily be implemented by private landowners through a series of future redevelopment projects which are conceptually identified and described in the Design Strategy for the BOA Plan. At the conceptual level the BOA Plan identifies the following key or catalyst projects:

- Events (food and cultural);
- Wayfinding;
- Critical Infrastructure;
- Irish Cultural Center and Maritime Museum Boat Building School;
- Eco-hotel at the Millens & Sons Strategic Site;
- · Waterfront Connections and Bulkhead Enhancements;
- Complete Street Improvements and Multimodal Connections;
- Greenline Construction;
- Island Dock Park;
- Regional Park/ Destination Playgrounds;
- Cut Fill Remediation and Adaptive Edge Development;
- · Food/Culture Hub at the Cornell Building;
- 150 Key Hotel at the Noah Hotel strategic site;

- Western Anchor Development, and
- Promenade and Trolley Line Extension.

PHASING STRATEGY

It is anticipated that redevelopment of the Kingston Waterfront in accordance with the BOA Plan will occur in several multi-year steps, as presented in Section 6 of the BOA Plan. The anticipated phases include:

PHASE 0 (0-2 YEARS)

- Pop-up park
- Food events
- Wayfinding and signage
- Art, antiques and other cultural events

PHASE 1 (2-5 YEARS)

Commercial	5,000 sf	
Retail	5,000 f	
Hotel	0 sf	
Civic	20,000 sf	Irish Community Center
Residential (area)	10,500 sf	Planned Residential Conversion of Church
Residential (units)	9 units	1200 sf per unit
Surface Parking	15 spaces	(not included in area estimate)
Structured Parking	0 spaces	
TOTAL	40,500 SF	

FIGURE 08.2 Total Phase 1 development

PHASE 2 (5-10 YEARS)

Commercial	0 sf	
Retail	131,500 sf	includes grocery store
Hotel	32,000 sf	40-key eco-hotel
Civic	0 sf	
Residential (area)	12,000 sf	
Residential (units)	10 units	1200 sf per unit
Surface Parking	160 spaces	(not included in area estimate)
Structured Parking	200 spaces	assume 325 sf per space
TOTAL	240,500 SF	

FIGURE 08.3 Total Phase 2 development

PHASE 3 (10-20 YEARS)

Commercial	235,000 sf	
Retail	110,500 sf	
Hotel	120,000 sf	150 key hotel, Assumes 850sf per key to capture common space
Civic	91,000 sf	
Residential (area)	103,500 sf	
Residential (units)	86 units	1200 sf per unit
Surface Parking	81 spaces	(not included in area estimate)
Structured Parking	300 space	assume 325 sf per space
TOTAL	757,500 SF	

FIGURE 08.4 Total Phase 3 development

PHASE 4 (20+ YEARS)

	Change A david an magnet	
TOTAL	618,250 SF	
Structured Parking	250 spaces	assume 325 sf per space
Surface Parking	45 spaces	(not included in area estimate)
Residential (units)	321 units	1200 sf per unit
Residential (area)	385000 sf	
Civic	0 sf	
Hotel	0 sf	
Retail	31,000 sf	
Commercial	121,000 sf	

FIGURE 08.5 Total Phase 4 development

For the purposes of this generic environmental assessment, where appropriate impacts are considered cumulatively at full build-out as shown in Figure 08.6

estimate)

FIGURE 08.6 Total development

ENVIRONMENTAL SETTING – EXISTING CONDITIONS

This section includes a concise summary to describe several existing conditions in the 190-acre BOA. This section includes descriptions of:

- Community and regional setting;
- Existing land use, ownership and zoning;
- Brownfield, abandoned and vacant sites;
- Strategic sites;
- · Parks and open space;
- Building inventory;
- · Historic and archeologically sensitive areas;
- Transportation systems;
- Infrastructure and utilities;
- · Natural resources and environmental features, and
- Economic conditions and market trends.

This section satisfies the SEQRA requirement for a description of the existing environmental setting as stated in 6NYCRR §617.9(b)(5)(ii). Additional detail describing the environmental setting is found in the BOA Step 2 Nomination Study, as updated in the Step 3 documents.

COMMUNITY AND REGIONAL SETTING

The community and regional setting are described in the Step 2 Analysis of the Proposed BOA - Section III.A which includes: regional context, demographics, overview of the City of Kingston, socio-economic conditions; housing, transportation and commuting patterns; existing infrastructure; and existing natural features. The local and regional context is updated in the BOA Plan Section 4 (Background - Environmental Setting).

EXISTING LAND USE, OWNERSHIP AND ZONING

Existing land use is shown on Map 4 and described in Step 2 Section III.B.1 of the Step 2 Nomination Study. Land Use has been updated in BOA Plan Section 4 (Physical Context). Land use categories are defined in BOA Plan Section 6 (Land Use). An updated land use map is also presented in BOA Plan Section 4 (Physical Context).

The BOA Plan includes a number of different land uses. For the purposes of the BOA Plan land uses are categorized as follows:

Residential - low to medium density households that provide a range of user types such as, market rate, affordable units, senior housing, artist lofts and live-work.

Mixed-Use Commercial/Residential -Typically multifamily residential buildings with stores and/or neighborhood services on the ground floor. Mixed-use buildings with both offices and residences are possible; however no commercial space can be on a higher floor than a residential unit.

Commercial - Job generating spaces that are typically cleaner than industrial space. These spaces are commonly office space, retail and flexible desk spaces.

Mixed-Use Commercial/Civic/Residential - This allows for the largest spectrum of uses and allows new developments to respond to the market demand. It is intended to be cleaner than industrial uses and provides enough flexibility to help establish core mixed-use communities. Commercial is not restricted to just lower floors and instead, if the market can absorb it, any mix of the building could be incorporated.

Hotel - Hotels are places of lodging that provide sleeping accommodations and supporting facilities.

Industrial - Reserved for manufacturing, transportation, utilities and storage uses.

Park/Open Space - Open space is any open piece of land that is under developed and is accessible to the public. These spaces are typically seen as assets and opportunities for recreation and access to nature.

The land use categories that occupy the most land area within the BOA are Parks and Open Space (105 acres / 55 %) and Industrial (22.5 acres / 12 %). In addition, much of the land area land is vacant (40.9 acres / 21 %), or underutilized surface parking and scattered vacant or underutilized industrial parcels. Industrial uses include the HeritagEnergy Terminal, a marina and vacant industrial lands. Former uses include a metal fabricator, two auto/metal recycling facilities, and two tanks. Commercial and non-profit uses include a restaurant and three museums including trolley, and maritime museums and KOSCO dockage by state agencies. Other than the marinas and maritime museums, few of the businesses are water-dependent or related uses. It is noted that the total area within the BOA boundary is approximately 419 acres, including 190 acres of land area and 229 acres of water outside boundaries of land parcels. – Figure 08.7 provides a breakdown of existing land use categories by area.

LAND USE	EXISTING AREA (ACRES)
Residential	2.5
Vacant	40.9
Mixed-Use Commercial/Residential	0
Commercial (including Hotel and Parking)	0.6
Recreation/Entertainment	4.1
Public Services	6.3
Community	2
Industrial	22.5
Parks/Open Space	105
ROW and other uses	6.1
Total land area	190.0

FIGURE 08.7 Existing Land use

EXISTING LAND OWNERSHIP

The Existing Land Ownership is shown on a Map 16 and described in Section III.C.3 of the Step 2 Nomination Study. Much of the land area in the BOA is owned by the City of Kingston (112 acres / 59%). These lands play an important role in the redevelopment plan since they include public park land (including waterfront access) and public infrastructure and include Block Park, Kingston Point Park and the Sewage Treatment Plant. These sites are included in the BOA because they directly contribute to and/or influence the redevelopment potential of the area. The land ownership pattern is summarized in Figure 08.8 to reflect the additional parcels included in the proposed expanded BOA boundary.

OWNERSHIP	NO. OF PARCEL	S		AREA (APPROX.	ACRES)	
	Step 2 BOA	Expanded Boundary	Total Parcels	Step 2 BOA	Expanded Boundary	Total Land Area*
Private	74	11	85	67	11	78
Public (City of Kingston)	13	1	14	95	7	102
Road Right of Way	-	-	-	10	<1	10**
Total Waterfront BOA	87	12	99	172	18	190

FIGURE 08.8 Land ownership

*includes water portion within parcel boundaries

** does not count 2 acres of City and ROW that are "double counted"

EXISTING ZONING

Chapter 405 of the City of Kingston Code provides the primary land use regulation in the City, including within the BOA. The existing zoning is described in Section B.2 of the Step 2 Nomination Study and is presented on Map 5. The existing zoning districts within the BOA include:

- RF-R (Rondout Creek District)
- RF-H (Hudson Riverfront District)
- RRR (residential district)
- M-2 (General Manufacturing)
- C-2 (General Commercial)

As-of-Right, or "Permitted" uses allowed in each district are listed in a table on page 51 of the Step 2 Nomination Study. The Step 2 Nomination Study also indicates that a considerable amount of land is occupied by active businesses that are non-conforming uses according to current zoning. The uses called for in the preferred development scenarios fit within the existing zoning districts and do not require significant amendment to the allowed uses in those districts.

Other relevant local land use laws that guide development within the BOA are described in Sections 4 and 7 of the BOA Plan include:

• Control of "Waterfront Facilities" codes under the Kingston City Harbor Manager.

- Waterfront Consistency Regulations under the City of Kingston Local Waterfront. Revitalization Program.
- 2006 City of Kingston design guidelines.
- City of Kingston Waterfront Zoning Regulations.

BROWNFIELD AND FORMER INDUSTRIAL SITES

This section summarizes what is known to-date about the existing brownfield and former industrial sites within the BOA, including known potential contamination issues. This summary is based on existing or historical records, existing remedial investigations, studies and reports reviewed or prepared as part of the Step 2 Nomination Study. Map 3 (Underutilized Sites) in the Step 2 Nomination Study depicts the location of relevant known brownfield sites and other vacant sites within the BOA.

A comprehensive environmental audit was prepared during 2002-2003 by the Mid-Hudson Land Revitalization Partnership. For the audit, the BOA was broken into three separate "environmental evaluation sectors" which were grouped geographically and shared unique characteristics that distinguished them from the other sectors. The audit covered 27 clusters on the Rondout Creek and Hudson River waterfronts in the City of Kingston; all within the BOA. The audit was part of a U.S. Environmental Protection Agency Brownfields Pilot Project.

The overall conclusion of the audit was that all of the parcels evaluated as part of Kingston's BOA program have some potential environmental problems related to previous industrial uses. Also, there may also be construction-related issues due to the nature of the materials that were used to build up the lands along the Hudson River and fill in large portions of the waterfront areas. As stated in the Step 2 Section III.C, it is anticipated that degraded environmental conditions typical of the region can be remediated using readily available, traditional cleanup alternatives. Detailed information regarding the audit is provided in the Step 2 Nomination Study, Section III.C.

Based upon the Phase I Site Assessments, the City of Kingston and its partners identified three priority assemblages to designate as Strategic Sites in the Step 2 BOA Nomination. Appendix 4 (Additional Environmental Site Assessments) of the Step 2 Nomination Study provides the Environmental Site Assessments (ESA) which were performed in 2008 for The Landing and the KOSCO property. These sites are shown on – Figure #15 (Strategic Sites Map) in the Step 2 Nomination Study. The Environmental Site Assessment for the third identified priority assemblage, the Millens site, could not be completed at that time due to it being under Consent Order with the New York State Department of Environmental Conservation (NYSDEC).

The existing contamination showing prior usage history of the BOA parcels is presented on the Contamination Map in Section 4.f (Known Environmental Conditions) of the Step 2 Nomination Study. This map highlights varying degrees of environmental conditions. Contamination along the Kingston waterfront may include heavy metals, dissolved inorganic pollutants, persistent organic pollutants, volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs). Any such contamination is capable of remediation and not an obstacle to redevelopment.

The Potential Contamination Type Map, presented in Section 4.f of the Step 2 Nomination Study, illustrates potential, historic and current possible contamination of the BOA parcels.

STRATEGIC SITES – ENVIRONMENTAL REMEDIATION OPPORTUNITIES

KOSCO ASSEMBLAGE

Contamination issues for the KOSCO Assemblage site (KOSCO) are identified and discussed in the Step 2 Nomination Study (Map 15 - Strategic Sites and Appendix 4). Previously, the KOSCO site was the base for 25 technicians for residential and commercial heating customers and a marine fueling terminal. The bulk petroleum storage tanks have since been removed from the site. The site is surrounded by a chain link fence and includes four one-story structures. The site is currently used by local artisans as well as by the NY State Police, Ulster County Sheriff's Office and NY DEC to dock emergency response vessels.

Groundwater monitoring wells were noted throughout the property during the site visit (conducted as part of the 2001 Phase I ESA), as well as stained soils in areas of the former bulk storage tank areas. This site has had a history of responsible operation by onsite managers. Any such environmental conditions can be mitigated and are not a significant impediment to redevelopment.

THE LANDING

As presented in the Step 2 Nomination Study (Section III.C.2.b.i and Appendix 4), a Phase I ESA was performed at the site in 2001. The ESA identified the presence of construction debris and unknown fill material onsite; the site was formerly used as a marina which may have included fuel storage as part of its operations; and there is a potential that contaminated groundwater from the adjacent site (former manufactured gas plant) may have migrated to the Landing site. Based on the 2001 ESA, a 2005 Site Characterization Investigation of the site was performed. The investigation identified Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds SVOCs and elevated metals exceeding New York State Department of Environmental Conservation (NYSDEC) standards were found in soil and groundwater on the western one-third of the property (possibly attributed to the current and historic operations of the western and northern adjoining properties). Any contamination emanating from adjoining property owners is the responsibility of those adjoining property owners to remediate.

Any such environmental conditions can be mitigated and are not a significant impediment to redevelopment.

MILLENS & SON SCRAP METAL RECYCLING

According to the 2008 Phase I ESA performed for The Landing Site (Appendix 4 of the Step 2 Nomination), Millens Scrap Yard is identified as a delisted Inactive Hazardous Waste Disposal Site. This facility (site code 57480) has soils contaminated with Polychlorinated Biphenyls (PCBs), petroleum, and metals. Groundwater is also

contaminated at the site and the plume has migrated off-site. The site is also listed as a Petroleum Bulk Storage, Chemical Bulk Storage, and Aboveground Storage Tank site. Six spills were reported at the Millens scrap yard. The spills mainly involved oil run-off associated with car crushing operations, with one spill associated with an unknown 55-gallon drum. One of the spills (NYSDEC ID 9604764) from the car crushing operation remains open in the NYSDEC database. There is known contamination at this property associated with the car crushing operation (Appendix 4 of the Step 2 Nomination).

There have been several investigations performed since 1996 at the site to delineate the location and depth of contamination. A Remediation Investigation/Feasibility Study was submitted in 2004 including recommendations for excavation of the PCB-contaminated soil, active in-situ remediation of VOC contaminated soil, and eventual capping of remaining areas. Soil vapor extraction was required to be completed and operational by April 2005. During June and July 2007, additional soil investigations were performed. The results of this investigation found one VOC in one location, SVOC exceedances in subsurface soils, and metals. Barium, chromium, lead, VOCs, benzene and Methyl Tertiary Butyl Ether (MTBE) were detected in groundwater at several wells. SVOCs were detected in an off-site well. In June 2008, the NYSDEC listed the site as a Class 2 Inactive Hazardous Waste Site. NYSDEC performed a Remedial Investigation of the site during 2012 to 2013. VOCs, SVOCs, metals, and PCBs were detected in surface and subsurface soils off-site. VOCs were detected in groundwater in the southern portion of the site.

In May 2015, a Citizen Participation Plan was generated for the site. According to the Plan, an Interim Remedial Measure for in-situ treatment of groundwater and residual soil contamination at the site is currently being developed under a NYSDEC Consent Order.

BLOCK PARK / ISLAND DOCK

Upon a search of the NYSDEC Spill Incidents Database, there was one spill listed for this site. Spill #0906182, Block Park, is listed as a raw sewage spill in the soil which occurred on August 8, 2009. The spill was closed on August 8, 2009.

Phase I and Phase II Environmental Assessments were performed for the Block Plant and Island Dock sites. According to the Limited Phase II Environmental Site Assessment, Former Concrete Block, Inc. Facility (Island Dock), Kingston, New York, July 2005, environmental conditions for the sites include: historical use of the site as a coal storage yard; electric transformer casings that may have impacted surrounding soil on the island; scrap metal and wood debris located onsite; and petroleum releases were noted in nearby areas.

The Phase II field investigation at the former Block Plant facility and Island Dock site consisted of Geoprobe[™] borings and test pits to collect surface and subsurface samples. A supplemental round of surface soil sampling was also performed following the initial field work. The analytical results of the field investigation resulted in the detection of VOCs and SVOCs in the surface soils. Metal concentrations along with SVOCs were detected at levels marginally exceeding their respective NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4046 Criteria. The most likely remediation plan at Island Dock will be installation of a membrane

covered with soil capping.

SVOCs were found at both the former Block Plant Factory and the Island Dock site. SVOCs were also detected in the location of a former aboveground petroleum storage tank.

Evidence of coal and coal slag were found in borings obtained from the Island Dock site. Low-levels of VOCs were identified in the area of the former Block Plant Factory.

The Island Dock site is currently in the Brownfields Cleanup Program (Voluntarily). Any such environmental conditions can be mitigated and are not a significant impediment to redevelopment.

NOAH HOTEL

A search of the NYSDEC Spill Incidents database found that there was one reported spill associated with the site. The spill is listed in the NYSDEC Spill Incidents Database as Construction Site/AKA Noah Hotel. The spill is dated October 28, 2005 and was identified as unknown petroleum. The spill was closed on January 20, 2010. At this time, there is there are no additional environmental records or known environmental investigations related to this site.

PARKS AND OPEN SPACE

Existing parks and open space are identified and described in detail in the Step 2 Nomination (Section III.B.4) and presented on Map 7 of that study – Parks and Open Space and is further discussed in this Step 3 document in Section 4 (Background - Environmental Setting). There are three parks within the BOA area which total approximately 105 acres of open space.

Existing parks include:

- Kingston Point Park and Kingston Beach
- TR Gallo Waterfront / West Strand Park and Rondout Landing Dock
- Block Park (included in the proposed BOA boundary expansion)

Located outside the BOA but in close proximity are:

- Kingston Urban Cultural Park
- Hasbrouck Park
- Cornell Park

BUILDING INVENTORY

An inventory of key buildings is provided in the Step 2 Nomination (Section III.B.5) which describes key structures assessed at that time and presented on Map 8 of that Plan. This BOA Plan provides an update of key buildings, and expands the building inventory in Section 4.a with the description of the proposed BOA boundary extension. Key existing structures include:

- The Hudson River Maritime Museum;
- Boat-building school in an annex to the Hudson River Maritime Museum (formerly Rosita's Restaurant);
- Kingston Trolley Museum;
- The Millens Steel and Fabricating Service, Inc. (currently Ole Savannah Restaurant) (NRHP eligible);
- Cornell Steamboat Company Shops (NRHP eligible);
- · City of Kingston Waste Water Treatment Plant;
- Rondout Lighthouse (NRHP listed);
- Sampson Opera House;
- Abandoned brick building, 144 Abeel Street (in proposed BOA extension);
- Hideaway Marina (various buildings), 170 Abeel Street (in proposed BOA extension);
- P&T Surplus, 194 and 198 Abeel Street (in proposed BOA extension), and
- Former Block Plant 320 Abeel Street (in proposed BOA extension).

HISTORIC OR ARCHEOLOGICALLY SIGNIFICANT AREAS

An inventory of historic sites and buildings is provided in the Step 2 Nomination Study (Section III.B.6) which describes historic and archaeologically sensitive areas and is also presented on Maps 9 and 10 of the Step 2 Nomination. The BOA Plan provides a list of historic districts and landmarks, historic structures, buildings eligible for National Register Listing and historic resource surveys.

Historic districts and landmarks located within the BOA that are listed in the National Register of Historic Places include:

- Rondout/West Strand Historic District: An area of National Register properties, ca. 1825.
- Part of the Chestnut Street Historic District: An area of late 19th-century National Register properties.
- Port Ewen Suspension Bridge.
- Rondout Lighthouse: Ca. 1915, located off Kingston Point.
- S. & W. B. Fitch Bluestone Headquarters: This Kingston-designated landmark, now a residence, once served as the office of a leading local industry.

Historic structures that are City landmarks of importance to the history of Kingston and the development of industry on the Hudson River include the following:

- Wilbur Neighborhood: Distinctive waterfront community.
- West Shore Railroad Trestle: Ca. 1895, this trestle continues to provide major rail service in the region.
- Island Dock: A man-made island in the Rondout Creek, originally designed for the transfer of coal.
- Millens Steel Building (Steelhouse Restaurant): Ca. 1870, originally a boiler shop for the shipbuilding industry.
- Ponckhockie Union Congregational Church: A cast-concrete, late 19th century structure.

Buildings that may be eligible for listing in the National Register of Historic Places include:

- Millens Steel Building (Steelhouse Restaurant).
- Cornell Steamboat Shops: This NRHP-eligible property represents one of the major 19th-century industries in the area.

HISTORIC RESOURCE SURVEY

The Ponckhockie neighborhood adjoins, but is not within the BOA. Although the Ponckhockie neighborhood has not been listed in the National Register, a portion of it was identified as a supplemental preservation area in the Urban Cultural Park Management Plan in 1987. The Ponckhockie neighborhood was included in a formal historic resource survey conducted during the preparation of the City of Kingston's Urban Cultural Park Management Plan in 1987. As described in Section III.B.6d of the Step 2 Nomination Study; of approximately 138 buildings surveyed in the Ponckhockie neighborhood (including East Strand and North streets); approximately five buildings were considered to be of major importance with few alterations.

Based on this survey, the Management Plan recommended that Ponckhockie (and the Wilbur neighborhood) "be developed as an educational and interpretive tool for the Kingston Urban Cultural Park." It also identifies the Ponckhockie neighborhood as an important "peripheral area" that complements Kingston's National Registerlisted historic districts and core areas of the Heritage Area, and provides additional opportunities for interpretation and economic development. As a result, the Management Plan notes that the preservation and revitalization of the Ponckhockie neighborhood is a high priority objective of the Heritage Area.

ARCHAEOLOGICALLY SIGNIFICANT AREAS

Utilizing the NYS Office of Parks, Recreation and Historic Preservation's (OPRHP) on-line tool; Cultural Recourse Information System (CRIS); it was determined that the entire BOA area is located within an archaeologically sensitive area(s). Correspondence regarding archeologically sensitive sites within and surrounding the BOA was initiated with the Division for Historic Preservation within OPRHP on April 8, 2015. A response letter from OPRHP was received on April 15, 2015 stating that there is a potential for future redevelopment in the Study Area to impact archaeological and/or historic architectural resources.

TRANSPORTATION SYSTEMS

ROADWAYS

Roadways are assigned a functional classification based on the role they play in serving the flow of traffic through the roadway network. The functional classification system is divided into three main categories Arterials, Collectors, and Locals. These categories are then divided into sub-categories to stratify the range of mobility and access functions that roadways serve.

Frank Koenig Blvd. (U.S. Route 9W) is an Urban Principal Arterial Other running north-south along the western edge of the Hudson River. It crosses Rondout Creek near the center of the BOA. It is a four-lane divided roadway with auxiliary turning lanes at the intersections in the area. The posted speed limit is 45 MPH in the area.

Broadway's functional classification changes within the city of Kingston. It is an Urban Principal Arterial from Albany Avenue to Delaware Avenue. It then continues as an Urban Minor Arterial to its intersection with McEntee Street. At this point, it changes to an Urban Major Collector ending at Roudout Landing near the Rondout Creek. The speed limit on Broadway is 30 MPH; the city wide speed limit.

Abeel Street is an Urban Major Collector from Wilbur Avenue (NY Route 213) to Broadway and follows the Rondont Creek. The posted speed limit is the city wide speed limit of 30 MPH. Abeel Street connects with Rondout Landing, East Strand Street, West Strand Street, and Dock Street to form an east-west corridor for the entire BOA.

Rondout Landing begins at the foot of Broadway as an Urban Major Collector. The name of the road changes at the trolley tracks to East Strand Street and continues to North Street as an Urban Major Collector.

West Stand Street is a two lane Urban Major Collector following Rondout Creek between Broadway and Dock Street. Dock Street has one lane continuing from West Stand Street to Abeel Street, and is classified as an Urban Major Collector.

Wurts Street is a north-south Urban Minor Arterial which crosses Rondout Creek using the Port Ewen Suspension Bridge. The posted speed limit is 30 MPH.

McEntee Street is an Urban Minor Arterial from Broadway to Wurts Street. At the intersection with Wurst Street it continues southwest as an Urban Major Collector.

Garraghan Drive is an Urban Major Collector that connects US 9W to Broadway. The posted speed limit is 30 MPH. It is a two lane road with a curb center median. There are auxiliary turning lanes at the intersections.

INFRASTRUCTURE AND UTILITIES

This section describes the location, extent, condition and available capacity of existing infrastructure and utilities (water, sewer, wastewater treatment and stormwater, etc.).

EXISTING PUBLIC WATER SUPPLY (PWS)

The source of the public water supply is the City of Kingston Water Department (KWD). The service area for the KWD includes the City of Kingston and portions of the Town of Ulster and serves $\pm 24,000$ people through $\pm 7,900$ service connections.

The primary source of water is the Mink Hollow watershed in the Catskills which is piped into the ± 1.2 billion gallon Cooper Lake Reservoir in Lake Hill, NY. Water then is processed at the Edmund T. Cloonan Water Treatment Plant which has a nominal production capacity of approximately 8 million gallons per day (MGD). The average daily flow into the KWD system is ± 3.5 - 4 MGD. The peak daily flow of up to 4.7 MGD typically occurs in July.

KWD's current Capital Improvement Plan calls for more than \$18 million in capital projects over the next five years including infrastructure improvements at Cooper Lake and the treatment plant.

BOA EXISTING PUBLIC WATER SUPPLY FACILITIES

The KWD owns, operates and maintains the public water system in the BOA. The existing PWS system includes a network of distribution pipes, fire hydrants and individual service connections. The KWD distribution system in the BOA consists of pipe sizes ranging from 4" to 12" diameters. The typical static pressure in the system along Abeel and East Strand Streets is ±120 pounds per square inch (PSI) which is generally the highest pressure zone in the KWD system.

- East Strand: North side of the road, 12" cast iron crosses to south side of road at New Central Baptist Church 216 E. Strand.
- East Strand at Gill: 12" cast iron south side next to 8" gas.
- · East Strand Waterline continues on North Street past to Delaware.
- Abeel St. south side to block plant.

Many of the existing waterlines in the BOA are cast iron pipe (CIP) which has a nominal service life of approximately 75 - 100 years. The date of installation of the existing waterlines varies. However, some of the existing waterlines in the BOA are believed to be over 100 years old. CIP was widely used for waterlines through the 1950's until ductile iron and PVC became the standard pipe materials by the 1960's. Therefore, it is assumed that many of the waterlines in the BOA are at or near the end of their useful life and would be planned for full replacement concurrent with street improvement projects or redevelopment projects.

PWS UN-SERVED AREAS

Island Dock is not served by any active public water facilities.

EXISTING PUBLIC SANITARY SEWER SYSTEM

The City of Kingston owns and operates the public sanitary sewer system in the BOA consisting of gravity sewers, pump stations, force mains and siphons. The sewer system is generally a combined sewer system which collects and treats both sanitary wastewater and stormwater flows. With the exception of the combined sewer overflows, all of these facilities discharge to the Kingston Waste Water Treatment Facility on East Strand Street for treatment and discharge to Rondout Creek.

BOA EXISTING SANITARY SEWER FACILITIES

BOA PUMP STATIONS

The BOA is tributary to four existing pump stations. Pump stations #4, #11 and #12 each convey wastewater to gravity sewers on East Strand Street which then discharge to a fifth pump station #17 at the Wastewater Treatment Facility (WWTF). Pump station #13 discharges directly to the WWTF through a combined force main from PS #14 and #15 outside the BOA.

- PS #4 North Street and Delaware Avenue (Kingston Point Park); Capacity ±350 gpm, 6" force main. Discharges to 15" gravity sewer at East Strand and North Street, then PS #17.
- PS #11East Strand and North Streets: Capacity ±35 gpm. PS #11 is a 2 HP grinder pump station which serves the properties on the east side of North Street (Millens), Rondout Land Corp) and has a 2.5" force main which discharges into the 15" diameter East Strand sewer, then to PS #17.
- PS #12Broadway and East Strand Street (30 Rondout Landing): Serves lower south end of Broadway and West Strand Street. Ultimately discharges to East Strand gravity sewer and on to PS #17. Low capacity (2 hp submersible pump), 4" force main.
- PS #13Abeel Street at Block Park: Serves west end of German Street and intersection with Abeel Street (Block Park). Discharges directly to WWTP by way of the combined force main from PS #14 and #15. Capacity ±220 gpm, submersible, 6" & 8" force main.
- PS #17East Strand (Kingston WWTF): This pump station is actually part of the WWTF and accepts the flow from East Strand gravity sewers and other pump stations PS #4, #11 and #12) and delivers wastewater to plant. Total Capacity ±680 gpm (2 pumps), 6" force main.

GRAVITY SEWERS

The gravity sewers in the BOA serve as collectors which discharge into one of the four pump stations described above. The main gravity sewers in the BOA are on East Strand Street near the Kingston WWTF:

- West of WWTF; 15" diameter. Conveys wastewater from Ponckhockie neighborhood, PS #4 and #11, discharges to PS #17.
- East of WWTF from Hudson River Maritime Museum to PS #17.

BOA UN-SERVED AREAS:

There are no sanitary sewers serving Island Dock.

KINGSTON WASTEWATER TREATMENT FACILITY (WWTF)

Located adjacent to the BOA north boundary at 91 East Strand Street the Kingston WWTF is the one of the most significant and critical public facilities and land uses on the Rondout. The WWTF service area includes the City of Kingston, and portions of the Towns of Ulster and Esopus (Hamlet of Port Ewen).

Kingston WWTF Existing and Future Capacity

The capacity of the existing WWTF as well as future flows due to growth and development in the service area has been studied in the Kingston WWTF Long Term Capital Plan, (May 2015).

The current permitted capacity is 6.8 million gallons per day (MGD) 12-month rolling average. The regulated peak wet weather flow into the WWTF is targeted at approximately 10.5 MGD.

For the period from January 2011 to July 2014 the WWTF received and treated an average of 5.8 MGD (actually daily average flow of 5.2 MGD plus one standard deviation of 0.6 MGD). This includes the additional wet weather flow from the significant weather events of Hurricanes Irene in 2011 and Sandy in 2012. Therefore, based on average daily flow the plant normally operates at below its permitted capacity. The WWTF operation is not currently under consent order or moratorium and operation is generally in compliance with the NYSDEC State Pollutant Discharge Elimination System (SPDES) Permit. Therefore, based on allowable hydraulic capacity, the existing facility appears to have some surplus available current capacity.

Future flows included in the study included a modest growth allowance (less than 1000 persons) for the City of Kingston through 2035. Future flows also included obligations to the neighboring communities of the Towns of Esopus, Ulster and East Kingston for additional flows totaling approximately 0.4 MGD (average daily flow) as well as new flows from three planned developments in the City of Kingston totaling about 0.6 MGD ("Sailor's Cove", "Parking Garage" and "Hudson Landing"). Therefore, the available current surplus hydraulic capacity that exists at the WWTF may either already committed or under obligation. Some of the growth allowance could be assumed to be allocated to BOA development.

However, several other permit parameters were also analyzed with the various treatment processes at the facility to assess the capacities of individual unit processes as well as overall plant capacity. This analysis was done under current flows and future utilization scenarios. The findings of this study indicate that several processes have inadequate capacity under current flow conditions. Despite these process capacity issues the facility discharge water quality continues to meet required SPDES permit limits. The results of the analysis are summarized in Table 4-4 of the referenced study. The study further recommends that several improvements, replacements and/or upgrades will need to be implemented at the facility in the next 20 years to maintain plant capacity and expand capacity for future development.

COMBINED SEWER OVERFLOW'S (CSO'S)

According to the Combined Sewer Overflow Long Term Control Plan 4 the Kingston combined sewer system captures 89% of wet weather combined sewer flows for full treatment. Approximately 92% of the CSO volume for Kingston occurs in the



FIGURE 08.9 Hasbrouck CSO #5

BOA at the Hasbrouck CSO outfall #05. That outfall is located under the Hudson River Maritime Museum (green sign posted, Figure 08.9). The CSO #05 volume is approximately 29 MG/year with an average total duration of 423 hours/year over about 62 occurrences and a peak overflow rate of approximately 260 CFS. CSO #05 is active in both dry and wet weather.

There are two other minor CSO's in the BOA; CSO #06 at the foot of Broadway (near the flagpole and information booth), and CSO #07 Hunter located across from Island Dock near the foot of Ravine Street.

These CSO's can potentially negatively affect the water quality of Rondout Creek and specific measures have been implemented to manage it within required Water Quality (WQ) standards. There are currently no plans to eliminate these CSO's.

CSO POST CONSTRUCTION WATER QUALITY MONITORING

As part of their approved Long Term Control Plan the City of Kingston has conducted post construction water quality monitoring on Rondout Creek in the 2014 recreational season (May through September). According to the Rondout Creek Water Quality Study5 175 samples were collected on Rondout Creek during the study period and analyzed for fecal coliform, total suspended solids (TSS), dissolved oxygen (DO) and temperature. Based on the monitoring and testing results in the study period it was concluded that Rondout Creek was not impaired or precluded from meeting the applicable WQ Standards for Class C waters.

NATURAL RESOURCES AND ENVIRONMENTAL FEATURES

The BOAs existing natural resources and environmental features and current conditions are presented in the Step 2 Nomination Study Natural Resources and Environmental Features and Section 4, Figure 04.35. The Natural Resources and Environmental Features include: upland natural resources and open space; soil and topographic resources; surface waters, groundwater resources; wetlands; flood plains; erosion hazard areas; fish and wildlife habitats; scenic resources; and locally, state, or federally designated resources.

Natural resources and environmental features have generally remained the same since the Step 2 Nomination was submitted, with the exception of issues related to flooding, which is discussed in greater detail below.

FLOOD RISK

FEMA FLOOD INSURANCE STUDY (FIS)1

The current FIS for the City of Kingston has an effective date of September 25, 2009 and has undergone one update which was issued December 12, 2011. According to the FIS Table 8 on page 28 of the FIS, the effective regulatory 1% Base Floor Elevation (BFE) for the BOA is elevation 8.2 (NAVD 88). This regulatory BFE takes into account the backwater affect from the Hudson River. However, this BFE does not take into account the effects of a tidal surge, such as occurred with hurricane Sandy in 2012, nor does it take into account the effects of Sea Level Rise (SLR).





FIGURE 08.11 FEMA Flood Insurance Rate Map



FIGURE 08.12 Floodway Schematic

FLOODWAY BOUNDARY AND FLOODWAY FRINGE1

Also shown on the FIRM is the Floodway boundary. The Floodway is defined as the waterway channel that must be kept free of encroachment so that the 1% Base Flood can be carried without substantial increases in flood heights. The Floodway Fringe is the area between the Floodway and the floodplain boundary (SFHA). The Floodway Fringe is the portion of the floodway that could be completely obstructed without increasing the water surface elevation of the 1% Base Flood more than 1.0 foot at any point. The Floodway Fringe is an area that development encroachment is allowable under FEMA minimum standards. The relationship between the Floodway and Floodway Fringe is shown below in Figure 1 (excerpted from the Ulster County FIS).

As shown on the FIRM, the Floodway Boundary in the BOA roughly corresponds to the northerly bulkhead line of the Rondout Creek waterfront. Therefore, the majority of the BOA lies in the Floodway Fringe, or the area of allowable encroachment. According to the FIS and FEMA standards development could occur in the Floodway Fringe without increasing the 1% Base Flood elevation more than 1.0 foot. However, development in the Floodway Fringe will still be subject to flooding.

KINGSTON TIDAL WATERFRONT FLOODING TASK FORCE

Fundamental to the evaluation of flood risk for the BOA is whether or not one is to account for the effects of tidal storm surges and projected Sea Level Rise (SLR). The FEMA FIS does not take into account either of these two phenomena.

The City of Kinston has issued the document Planning for Rising Waters: Final Report of the City of Kingston Tidal Waterfront Flooding Task Force in September, 2013. The purpose of the study was to assess the risks and develop strategies to address the effects of tidal surges and sea level rise along the Rondout-Hudson waterfront.

Flooding Risks Today and in the Future

The study references various sources with SLR projections resulting in recommended range of a SLR of 20" to 36" by the year 2060 and 33" to 68" by the year 2100. The selected SLR ranges were then be added to the FEMA BFE (as described earlier in this report) as a basis for mapping the projected future extent of the "mean higher high water" (MHHW) and BFE floodplain and evaluating the future flood risks.

Section C of the study also included an evaluation of four alternative scenarios for cost/benefit for the East Strand/Ponckhockie neighborhood. Scenario A is "do nothing." Scenario B involves raising East Strand Street to elevation 11. Scenario C involves constructing and elevated bulkhead with levee and path to elevation 11. However, neither scenario B or C will provide protection from SLR because elevation 11 is not high enough given the even the most modest SLR projection criteria.

Recommendations

The study developed a list of 24 general recommendations for the City as well as several site specific recommendations for 11 shoreline neighborhoods. The general recommendations are grouped by five major categories and sub-grouped by "Near-term" and "Long-term" actions. The site specific recommendations include specific recommendations for seven of the "neighborhoods" which are included inside the BOA boundary.

The reader is directed to Appendix A for the Final Report for full details of the findings and recommendations.

EAST STRAND STREET FLOODING AND STORMWATER MANAGEMENT ANALYSIS

East Strand Flooding

Based on detailed analysis the East Strand Analysis concludes that the existing stormwater drainage systems in the East Strand Street area are inadequate to prevent localized "nuisance flooding" from storm runoff from upstream tributary areas (10 year rainfall event or less). This is due to both inadequate capacity and low elevations on East Strand Street. When a rainfall event occurs simultaneously with a high tide event the capacity of the storm drainage system is irrelevant.

Unrelated to storm drainage capacity issues, the study also notes that East Strand is subject to more extreme flooding from tidal events. A 10 year frequency tidal event causes flooding on East Strand to elevation ± 6.4 . Sea Level Rise will cause tidal flooding to increase in magnitude and frequency.

Flood Mitigation Criteria

This study recommends elevation criteria for newly constructed building in flood prone areas along East Strand should meet or exceed the NYS Task Force findings for predicted SLR. These are shown in Figure 08.13 excerpted from the study.

New York State Sea Level Rise Task Force Findings				
SLR Scenario	2020s Predicted Increase in Sea Level (inches/feet)	2050s Predicted Increase in Sea Level (inches/feet)	2080s Predicted Increase in Sea Level (inches/feet)	
Low Prediction	3.5 / 0.3	9.5 / 0.8	24 / 2.0	
High Prediction	7.5 / 0.6	24 / 2.0	48 / 4.0	

The recommendations include reducing the vulnerability of coastal areas, emphasizing coastal planning, directing new development away from high risk areas, increasing public awareness, and for all relevant agencies to incorporate SLR into their planning.

FIGURE 08.13 NYS SLR Task Force Findings

Zoning Local Law 405-26.G.3 and G.4 requires new residential and non-residential structures to be elevated to at least 2 feet above the effective BFE elevation of 8.2 (resulting structure elevation 11.2). Taking into account NYS Task Force findings on predicted SLR the recommended building elevation would be from 12.0 to 15.2 depending on what elevation criteria is considered appropriate for the facility.

ECONOMIC CONDITIONS AND MARKET TRENDS

The existing economic conditions and market analysis within the BOA and City in general were presented in Section III.D of the Step 2 Nomination Study and updated in Section 4 of this BOA Plan.

ASSESSMENT AND MITIGATION OF POTENTIAL SIGNIFICANT ADVERSE IMPACTS

This section assesses potential significant impacts that may result from implementation of the BOA Plan and identifies potential mitigation measures for those impacts considered significant and adverse, based on the information known at this time.

IMPACTS ON LAND USE, COMMUNITY CHARACTER AND OWNERSHIP PATTERNS

Future land use was described in detail in the Step 2 Nomination Study Section E.5 (Proposed Waterfront Land Uses) and depicted on the Kingston Waterfront Development Implementation Plan map. The BOA Plan includes a full range of improvements proposed to support a mixed-use BOA and waterfront including new commercial development, trail and recreational projects, shoreline infrastructure needs, transportation improvements, and support for local museums among other actions. This Step 3 Study refines future lands uses in Figure 08.15 and conceptually identifies future redevelopment projects in the Hudson Riverport Vison Plan in Section 6.

Implementation of the BOA Plan will result in changes to the existing land use patterns as well as character of the immediate surrounding area. The Strategic Sites have been targeted for redevelopment as catalyst projects to spur secondary redevelopment around them. Given that the strategic sites (with the exception of Block Park) are primarily vacant or underutilized brownfields, the proposed changes in land use to active commercial, entertainment, recreation and/or residential uses are anticipated to be positive land use impacts on the properties and surroundings. Preferred land uses for the BOA in general and Strategic Sites specifically are described in detail previously in this section (Project Description). Figure 08.14 quantifies the area (in acres) of each land use category under full implementation of the BOA Plan. The Preferred Land Use Option Map is presented in Figure 08.15.

Implementation of the BOA Plan would result in some changes in how the land is occupied or developed. The greatest change in land use as categorized in Figure 08.14 may occur in Parks/Open Space land uses with a net increase of over 24 acres. The redevelopment of the Strategic Sites will result in the permanent conversion of over 40 acres of currently vacant or underutilized areas to higher uses including, commercial, residential, and mixed-use and parks/open space.

Implementation of the BOA Plan represents a positive change in use that is consistent with the proposed Comprehensive Plan. In particular, the BOA Plan is consistent with, or supports the achievement of the following Goals presented in the proposed Comprehensive Plan (see section 7.c.ii):

- Goal 1: Objective 1.1: Regulate a land use pattern that concentrates residential density and commercial activity in mixed-use cores, rather than separating uses and densities and orienting commercial activity along vehicular corridors.
- Goal 1: Objective 1.4: Promote a citywide aesthetic and culture that is vibrant, attracts visitors to the City, and makes Kingston a more effective center for government, commerce and culture in Ulster County.
- Goal 2: Objective 2.5: Promote social interaction through the provision of neighborhood gardens, community gardens, parks and other open spaces.
- Goal 3: Objective 3.2: Identify and protect scenic views as seen from roadsides, parks,

	EXISTING (acres)	PREFERRED (acres)	CHANGE (+/- acres)
Residential	2.5	6.7	+4.2
Vacant	40.9	0	-40.9
Mixed-Use Commercial/Residential	0	9.2	+9.2
Commercial (including Hotel and Parking)	0.6	19.7	+19.1
Recreation / Entertainment	4.1	1.1	-3
Public Services	6.3	4.3	-2
Community	2	5.3	+3.3
Industrial	22.5	5.9	-16.6
Parks / Open Space	105	129.8	+24.8
ROW and other uses	6.1	8	+2.1
 totals	190	190	-

FIGURE 08.14 Preferred land uses table



FIGURE 08.15 Preferred land uses map

waterfronts, and other areas frequented by the public.

- Goal 4: Objective 4.1: Strategy 4.1.4: Take advantage of the proximity to the Hudson, Rondout, and Esopus waterways, Shawangunk and Catskill Mountains and other natural resources.
- Goal 4: Objective 4.3: Strategy 4.3.1: Follow through on the development of a Generic Environmental Impact Statement (GEIS) and Implementation Plan for the Rondout Waterfront.
- Goal 7: Objective 7.3: Increase the access and maintenance of neighborhood parks and recreation facilities.
- Goal 10: Encourage vibrant mixed-use land use patterns in Rondout centered around waterfront access, restaurants and tourist attractions, and active recreation.

The majority of redevelopment projects will occur on private property and the overall land ownership patterns will remain the same. However, the BOA Plan does recommend one significant change in ownership between public and private lands. The BOA Plan proposes that Island Dock (approximately 17 acres of uniquely scenic undeveloped land with 6500 running feet of vessel accessible waterfront perimeter) might be purchased by the City of Kingston, possibly with the participation and/or assistance of an intermediate entity or entities, to be developed for public usage. A possible sale of Block Park (approximately 7 acres) by the City of Kingston to a private developer might generate some of the necessary funding for such an acquisition. The city-owned parkland could become private and available for development and the privately-owned vacant former industrial property could become a public park. There will be a net increase of approximately 13 acres in public-owned land. As this scenario is further investigated and advanced, one impact to be evaluated in detail will be costs of acquisition and re-locating/re-building the existing park facilities and of the environmental remediation on Island Dock will be allocated.

IMPACTS ON NATURAL RESOURCES

This section addresses the potential effect of the BOA Plan on groundwater and surface waters, wetlands, flood plains, erosion hazard areas, fish and wildlife habitats, and other local, state, or federally designated resources.

As presented in Section 6, the BOA Plan's Habitat Strategies guide restoration and protection of the existing natural habitat, as well as guides the integration of new habitat corridors throughout the BOA. The strategies include:

- Providing new habitat opportunities at the edges through selective softening of the shoreline,
- Creating reef streets that provide small niches and vegetation for fish to hide and spawn by restoring existing wetlands, and
- Creating wetland buffers.

The redevelopment of the Strategic Sites would offer an overall enhancement to natural resources at each of the Strategic Sites, where most have been utilized as industrial sites and some are currently vacant or abandoned. Enhancements resulting from redevelopment to the preferred uses include;

- Expanded greenspace,
- Restoration and protection of existing natural habitat,
- · Creation of wetland migration buffers, and
- Creating educational trails.

The Kingston Point redevelopment plan includes restoration to existing wetlands and construction of a boardwalk to allow for public access to view the wetlands. The majority of the BOA does not impact any designated wetland areas. Any future project within a designated State or Federal wetland or within a 100' buffer of a State wetland would require that future design avoid the wetland to the maximum extent possible or minimize the footprint. Wetland mitigation would most likely be required for any redevelopment in a designated wetland or wetland buffer area and consultation with New York State Department of Environmental Conservation (NYDEC) and United States Army Corps of Engineers (USACE) would be required.

The development and planning of the BOA strategic sites utilized the City's Waterfront Design Standards to promote new development which enhances the natural resources. Therefore, it is not anticipated that redevelopment of the Strategic Sites will result in significant adverse impacts to the existing natural resources.

Natural resources and environmental features have remained the same since the Step 2 Nomination was prepared, with the exception of changes in flooding information which is presented next.

IMPACTS FROM FLOODING

The majority of the BOA is located in the regulatory Special Flood Hazard Area. Redevelopment or new development in the BOA will be subject to flooding. The primary cause of flooding is high water surface elevations in Rondout Creek and the Hudson River which are greatly influenced by high tides, storm surges and sea level rise. Some portions of the BOA are also subject to flooding from storm runoff from upstream tributary areas.

The Hudson River is a first order stream. Due to the relatively large watershed area and conveyance capacity of the Hudson River, development in the BOA will not have a significant effect on the water surface level or flooding in the River. Numerous Local, State and Federal laws and regulations are in effect to ensure that waterfront development is managed according to required standards.

BOA FLOOD RISK MITIGATION GENERAL RECOMMENDATIONS

- Development in the floodway fringe is an allowable permitted use according to FEMA minimum standards. However, development in the floodway fringe will still be at risk and subject to periodic flooding. New development must be designed to incorporate appropriate flood proofing measures.
- Development in the BOA is subject to the requirements of Local Law Section 405-26. Specifically, all new residential and non-residential structures shall be designed in accordance section 405-26.G.
- Individual development proposals should consider the strategies and recommendations of the City of Kingston Tidal Waterfront Flooding Task Force from their final report dated 9/18/2013.
- Individual development proposals should consider the recommendations and criteria in

the East Strand Street Flooding and Stormwater Management Analysis final report dated 2/19/2014.

- The planning criteria for future Sea Level Rise for new development should be consistent with the anticipated life of the facility.
- New development or redevelopment projects which involve soil disturbance of 1 or more acres will be subject to the requirements the New York State DEC SPDES General Permit for Stormwater Discharges from Construction Activities. These projects will be required to implement temporary erosion and sedimentation control measures as well as permanent stormwater management practices for runoff reduction, water quality treatment and regulation of discharge rate and volume. The SPDES General Permit may not apply to all BOA redevelopment projects, if not then projects may require an individual SPDES.

POTENTIAL FLOOD MITIGATION STRATEGIES

Potential flood mitigation strategies were the focus of Section 6.3 in the East Strand Street Flooding and Stormwater Management Analysis. These mitigation strategies can be extended to the entire BOA waterfront. In this study the strategies were grouped into three main categories:

- · Fortification: various shoreline treatments; bulkheads, levees, flood walls, land filling.
- Relocation: of high risk facilities to higher ground (e.g. Kingston Waste Water Treatment Plant).
- Accommodation: Implementing measures to accommodate floodwaters to minimize damage (e.g. elevating structures, passage of floodwaters). These measures are already a requirement of Local Law 405-26, but do not take into account storm surges and sea level rise.

For the purposes of land use planning for the BOA an additional strategy could be:

• Zoning Modification: Modification of the existing Local Law 405-26 Flood Hazard Overlay District to further regulate permitted uses consistent with section 405-26.B to functionally dependent uses.

FLOOD MITIGATION MEASURES

Fringe Land Filling

Areas in the floodway fringe are by definition "the portion of the floodway that could be completely obstructed without increasing the water surface elevation of the 1% Base Flood more than 1.0 foot at any point." The floodway fringe is an area where development encroachment is allowable under FEMA minimum standards. The filling could be done on an individual parcel basis and would not necessarily need to be done to a specific elevation. According to the FIS the 1% BFE is 8.2 and the 10% flood elevation is approximately 6.0. However, these properties would still remain in the regulatory Special Flood Hazard Area (SFHA) until the flood mapping is revised. Structures would also still need to be constructed to the minimum standards of Local Law 405-26. Permits may be required for activities associated with land filling operations.

Flood Barriers and Levees

Various forms of bulkheads, flood barriers and levees could be constructed to provide hard protection from flooding. These types of measures may require large expenditures of public funds and result in encouraging development in flood prone

areas. They need to be designed and constructed to robust and stringent FEMA standards and actively maintained. When these measures fail the damage can be widespread and catastrophic. The reader is referred to section 6.3.5 of reference #5 (Appendix A: Section 8 Infrastructure References) for a detailed description of the considerations, criteria, advantages and limitations of flood barrier implementation. Due to the practical limitations, high cost and relatively small area that would benefit, these types of measures may not be appropriate for all areas in the BOA or considered sustainable and consistent with the goals of the BOA plan.

IMPACTS ON CULTURAL RESOURCES (HISTORIC AND/OR ARCHEOLOGICAL)

HISTORIC RESOURCES

Implementation and build-out of the BOA Plan may result in impacts on known historic resources in and in close proximity to the BOA. Direct effects to historic resources may include renovations and improvements to historic structures located at the Strategic Sites identified for redevelopment. The following cultural resources are located within the identified Strategic Sites for redevelopment:

- Island Dock: as presented in the Step 2 Nomination, is considered a City landmark of importance to the history of Kingston and the development of industry on the Hudson River. Also, the Kingston-Port Ewen Suspension Bridge is considered a Historic Landmark and crosses the eastern end of Island Dock.
- The Noah Hotel site is located within a National Register Historic District (Rondout/West Strand Historic District).

Measures will be taken to avoid, to the extent possible, or minimize impacts to historic resources. The preferred redevelopment activities on Island Dock should not involve any disturbance to the Kingston-Port Ewen Suspension Bridge. However, being that the Noah Hotel site is located within a National Register Historic District, additional consultation with OPRHP would be required prior to redevelopment activities once project-specific design is proposed.

ARCHAEOLOGICAL RESOURCES

Implementation of the BOA Plan may impact archaeological resources. In their April 15, 2015 response letter, the OPRHP stated:

Based on our review of the submitted materials, there is a potential for redevelopment in the Study Area to impact archaeological and/or historic architectural resources. Lacking specific plans for redevelopment, we are unable to provide specific comments and recommendations. We would be happy to provide such comments, when we are provided with detailed redevelopment plans.

Therefore, additional consultation with the OPRHP will be required for future sitespecific redevelopment projects that include ground disturbance or are located in Rondout Creek and/or the Hudson River. Consultation with OPRHP should be undertaken early in the design and application process and will need to be documented as part of any future project-specific SEQRA assessment(s).

VISUAL AND AESTHETIC IMPACTS

Implementation of the BOA Plan may result in significant changes in the visible landscape that are different from the current conditions and surrounding land uses. This section identifies and assesses the BOA Plan's potential to change the character or quality of aesthetic resources in and surrounding the BOA, including water views from existing residential neighborhoods west of the BOA.

As stated in the Step 2 Nomination, there are no State identified "Scenic Areas of Statewide Significance" in or around Kingston. However, there are a number of scenic vistas within the BOA that are significant. The following are considered significant scenic vistas within the BOA:

- Hasbrouck Park;
- Views from Kingston Point, the Kingston Point Lighthouse, the tip of Island Dock and the Port Ewen Suspension Bridge;
- · Kingston's Hudson River waterfront, and
- The Kingston identified "scenic zone."

As presented in the Step 2 Nomination, a "scenic zone" in Kingston was identified. This zone encompasses the middle ground of views seen from the district. The development character of the scenic zone is critical to the continued scenic quality of the district and of visual significance from higher elevations in Dutchess County. However, redevelopment in the scenic zone is at a significant distance from Dutchess County viewing sites and will have little visual impact on the character of western views except for instances of large-scale development.

The juncture of Rondout Creek and the Hudson River also lies within the Scenic Zone of the Mid-Hudson Historic Shorelands Scenic District. The Scenic Zone defines an area within which new development could adversely affect the quality of the western viewshed of the Scenic District. The Zone boundary lies 2,000 feet west of the high tide line on the west bank of the Hudson River. In the Management Plan for the Scenic District, the Strand and Kingston Point are described as visual features of the riverscape that contribute significantly to the district's scenic quality from wherever they are seen.

As presented in Section 6, part of the BOA Landscape Strategy is to create continuous public access with expansive views from the Rondout to the Hudson. The design presents major view corridors along streets to be kept open. Also, building heights and plantings will be kept lower at the water's edge to maintain views. At the sites where there will be buildings greater than 2 - 3 stories high, greater distances will be kept between the buildings to maintain connections and provide more scenic opportunity.



FIGURE 08.16 Redvelopment Building Heights

STRATEGIC SITES

Figure 08.16 presents redevelopment building heights and vision lines from surrounding areas to the strategic sites. Mitigation measures to avoid, to the extent possible, or minimize visual impacts were addressed in the development of design strategies during the early planning process. These strategies considered placement and height of buildings, spacing between buildings, surrounding residences, waterfront view, and "green buffers." The redevelopment of the Strategic Sites would offer an overall aesthetic improvement at each of the Strategic Sites, where most have been utilized as industrial sites and some are currently vacant or abandoned. Enhancements resulting from redevelopment to the preferred uses include; expanded greenspace and an enhanced waterfront.

KOSCO ASSEMBLAGE

The preferred redevelopment option includes two buildings that would range from 3 - 4 stories high. Figure 08.17 depicts the line of vision from the surrounding neighborhood to the KOSCO site. As shown in the Figure, the line of vision from surrounding residences to the redevelopment buildings would have little to no visual impact to the surrounding views and waterfront. The redevelopment activities would maintain view corridors along streets and provides new means to engage the waterfront.



FIGURE 08.18 KOSCO Assemblage site section key plan



FIGURE 08.17 KOSCO Assemblage Site Section

THE LANDING

The preferred redevelopment option will be a focused single building of 2 - 3 stories that creates a mixed-use trolley terminal with retail and cultural space. The Landing is located at the mouth of Rondout Creek and is bordered by the Millens property (former industrial site). The line of vision of the surrounding residences to the redeveloped site will have little to no visual impact due to the projected design (height and placement) of the redeveloped buildings.

MILLENS

The preferred redevelopment option of the site is combined with adjoining properties to create a destination 40 key eco-hotel with smaller guest room consisting of low-impact bungalows. The guest rooms would be situated along a boardwalk and offer a scenic view of the wetlands. The adjoining properties currently consist of condemned houses that have sustained damage from flooding and are beyond repair. The line of vision from the surrounding neighborhood to the site would have low to no visual impact. The hotel building would be 1 - 2 stories, which would result in low visual impact by maintaining views of the waterfront.

BLOCK PARK

The preferred redevelopment option includes buildings ranging from 4 - 6 stories high. As depicted in Figure 08.19, there would be no visual impact to the waterfront. There are minimal existing residential structures in the immediate surrounding Block Park area. The landscape to the north of Block Park slopes upward which provides the existing residences an unobstructed view over new development at Block Park to the waterfront. Due to the elevation difference, the view from the existing residential area to the waterfront will remain the same, and the view to the Island Dock area will be visually enhanced upon completion of the redevelopment activities at that site.

Island Dock

The preferred redevelopment includes a softball diamond on the south west corner of the parcel, bioswales, a network of pedestrian walkways, Greenline, trolley, and boardwalk to the entrance to Island Dock. The existing trees would be largely preserved with minimal walking trails and sculptural art would be displayed throughout. At the eastern tip of the island, a small amphitheater could be located and constructed as to not impact the line of vision from the surrounding areas to Island Dock. There would be no visual impact to the surrounding residences by incorporating the Island Dock redevelopment plan and the redevelopment would offer a visually enhancement of the Island Dock area.

NOAH HOTEL

The preferred redevelopment option includes two buildings are proposed at the site; the hotel and a 2 - 4 story commercial building. The original plan for this parcel was to be developed as a hotel. A series of public terrace landscape spaces would connect the upper level and lower level to provide green space, and would also be



FIGURE 08.20 Block Park / Island Dock site section key plan



FIGURE 08.19 Block Park / Island Dock Site Section

an opportunity to create a connection point to Island Dock and incorporate it into the development. A municipal garage would also be constructed and designed to have parking buried into the hillside, providing minimal visual impact. Due to the design of the building, there would be little to no visual impact from surrounding residences to the waterfront view.

It should be noted that this SEQRA assessment considers full build-out of the entire BOA Plan. As described in the phasing plan presented in Section 6 (Design Strategy) it is anticipated that build-out will take 20+ years. As the waterfront redevelops slowly, the changes in the visual landscape and community character will also change slowly. The incremental progression in visual landscape will temper the significance of the change.

The development and planning of the BOA strategic sites utilized the City's Waterfront Design Standards to promote new development which enhances the visual appearance of the City. By meeting those standards as well as the height limitations provided in the BOA Plan Design Strategy, it is not anticipated that significant adverse visual impacts to the existing scenic waterfront will result from the redevelop of the Strategy Sites. However, once project-specific designs are proposed, it is anticipated that a more detailed assessment of the visual impacts from any redevelopment project over 1 - 2 story should be done as part of the site plan and SEQRA reviews. This assessment may include view shed analysis to determine where the new development will be visible from and line-of-sight diagrams to facilitate an assessment of their level of impact.

OPEN SPACE AND RECREATION

It is anticipated that implementation/full build-out of the BOA Plan will impact publicly-owned parkland or open space, including Block Park, and Kingston Point Park/Kingston Beach.

The BOA Plan proposes improved public access via boardwalks and paths, improved facilities and amenities, and wetlands/habitat restoration at Kingston Point Park. In general, the recommended improvements a Kingston Point will be designed to be as low impact as possible and be sustainable. Design and construction of projects to implement the recommended improvements will require environmental permitting if those activities disturb wetlands and/or are located within the floodplain. Through the design, review and permitting process, impacts to wetlands will be avoided and minimized to the greatest extent possible. Where disturbance to wetlands are unavoidable, mitigation may be required to offset the impact. It is anticipated that the recommended changes at Kingston Point will to be positive in nature and not result in significantly adverse impacts.

The BOA Plan proposes that Island Dock (approximately 17 acres of uniquely scenic undeveloped land with 6500 running feet of vessel accessible waterfront perimeter) might be purchased by the City of Kingston, possibly with the participation and/or assistance of an intermediate entity or entities, to be developed for public usage. A possible sale of Block Park (approximately 7 acres) by the City of Kingston to a private developer might generate some of the necessary funding for such an acquisition. This real estate transaction would allow the relatively more upland Block Park (having direct access to the public street system) to be developed for residential and commercial uses. In turn, the former Block Plant and Island Dock could become public properties and developed for park purposes. Recreation facilities now located in Block Park could be relocated onto Island Dock. The athletic fields and baseball diamond could be replaced on a portion of the former block plant.

It is anticipated that mitigation will be required in order for the proposed transaction to remain impact neutral and include the following:

- Extension of German Street and improvements to Abeel Street.
- Bioswales and other flood mitigation infrastructure are incorporated into the landscape between buildings.
- Existing recreation facilities at Block Park could be relocated at the former block plant, on Island Dock, or in other park facilities in the Rondout neighborhood.
- Pedestrian and vehicular access improvements to Island Dock include:
 - Extension of the Greenline, trolley line (in the long-term);
 - Extension of boardwalk from Ravine Street west along the water to the entrance to Island Dock;
 - Pedestrian bridge to connect the island to Hone Street.
- Use of pavement for parking lot at the former Block Plant.

The preferred option for future development at Block Park by a private entity could include residential development with ground floor retail which represents a change to a more intensive land use and permanent conversion of the land from low intensity (recreation) to approximately 538,000 sf of mixed-use space including 321

residential units. Future proposal(s) for site-specific project(s) will require site plan review and SEQRA assessment once detailed design and engineering is available.

The BOA Plan does not propose any direct changes to TR Gallo Waterfront / West Strand Park and Rondout Landing Dock.

TRANSPORTATION IMPACTS AND MITIGATION

There are a number of improvements to the transportation system that are in the planning phase. The City has a plan to expand the existing, limited, trolley service to the entire waterfront. Another planned improvement is the Kingston Greenline. The Greenline is a plan to create a network of urban trails, complete streets, bike lanes and linear parks in the city of Kingston. With these plans, the multimodal access to the BOA will be improved.

The existing road network has a limited amount of accessible pedestrian accommodations. As the improvements are made special attention should be taken to incorporate accessible features. Another transportation improvement to consider are complete streets which will provides a place for all users.

The Kingston Waterfront BOA developments will generally be implemented by private landowners. There is a list of the key or catalyst projects in Sections 6 and 8 of this BOA Plan. These developments are described in previous sections of this document at a conceptual level.

When identifying the amount of traffic (trips) a particular site might add to the existing road network trips the standard practice is to use the Trip Generation Manual, published by the Institute of Transportation Engineers (ITE). This document contains trip generation rates for numerous land uses and building types. The rates are based on weighted averages from studies conducted throughout the United States and Canada. The 9th edition was used for this report. For each type of development described previously there are a number of different sub-types. Many of the sub-types trip generation rates have an extensive range of values. As an example, there are a number residential options discussed at the strategic sites. These types of units have a wide range vehicle trips ends as shown in the Trip Generation Manual. For instance, the average rate for trip generation per dwelling unit in on a weekday is 3.44 trips/dwelling unit for the Senior Adult Housing - Attached, ITE Land Use Code 252. The average rate for trip generation per dwelling unit in on a weekday is 6.65 trips/dwelling unit for the Apartment, ITE Land Use Code 220.

As these projects are developed beyond the conceptual level a more complete assessment of the transportation systems will need to be completed. A typical threshold used to determine the need for a Transportation Impact Analysis is if the proposed development adds 100 vehicles in the adjacent roadways' peak hour traffic generation or the development's peak hour traffic generation.

INFRASTRUCTURE AND UTILITIES IMPACTS AND MITIGATION

PUBLIC WATER SUPPLY (PWS)

BOA Projected Future Domestic Water Demand:

Based on the BOA Plan recommended land uses and potential projects the projected domestic water demand at full implementation is summarized by land use in the following Figure 08.21.

FIRE SUPPRESSION WATER SUPPLY

A detailed assessment of the ability of the existing KWD water distribution system to deliver adequate fire suppression water is beyond the scope of this review. The existing KWD water distribution system is assumed to meet current standards for fire suppression water supply. Development projects as described in the BOA plan will be designed to meet all applicable code requirements for fire protection. It is acknowledged and recommended that public and/or private water system improvements for fire suppression will be required for implementation of the BOA plan.

Based on the projected domestic water demand the BOA plan will not have a significant adverse impact on the Kingston public water system. This assessment is based on the following findings:

• The Kingston Edward T. Cloonan Water Treatment Plant has a nominal production capacity of approximately 8 million gallons per day (MGD). The existing average daily demand into the KWD system is \pm 3.5-4 MGD and the existing peak daily demand is typically 4.7 MGD. Therefore, the Kingston water system currently has surplus production capacity.

Proposed Land Use (1)	Gross SF(1)	Res. Units (4)	Hotel Rooms(3)	Unit Daily Demand Rate (GPD/unit) (2)	Projected Daily Demand (GPD)
Civic	111,000	-	-	0.10	11,100
Commercial	361,000	-	-	0.10	36,100
Retail	278,000	-	-	0.10	27,800
Residential (assume 1200 SF/unit)	511,000	426		300	127,800
Hotel	152,000	-	190	120	22,800
TOTALS	1,413,000	426	190	-	225,600
Total Average Daily Demand - Gallons Per Day (GPD)	225,600				
Maximum Daily Demand (2 times average) (GPD)	451,200				
Peak Hourly Demand Rate: Gallons Per Minute (GPM)					
Based on Peak Factor 4.0, 1440 minutes per day	627 GPM				

FIGURE 08.21 BOA projected domestic water demand

Figure 08.21 Footnotes:

- 1 Land uses based on Design Strategy 8/13/15, "Kingston Parcel_working 08 12 15.xlsx".
- **2** Use 0.10 GPD/SF for Civic, Commercial and Retail.
- 3 Use 120 GPD/hotel room.
- 4 Use 300 GPD/residential unit, (assume 1,200 df/unit, 2.75 persons/unit, 110 GPCD).

- The projected domestic average daily water demand for the BOA plan at full implementation is ±0.23 MGD with a projected peak hourly demand of ±627 GPM. Based on available information the existing KWD distribution system is capable of delivering domestic water to the BOA at adequate pressure, volume and rate.
- Some specific components of the existing water distribution system may have limitations due to pipe diameters and obsolescence (service life). Required upgrades and replacements to the KWD water distribution system can occur parallel with public street improvements and individual development projects.
- All new utility facilities shall be designed and built to required flood proofing standards and codes.

PUBLIC SANITARY SEWER SYSTEM

BOA Projected Future Wastewater Flow:

For the purposes of this review the future projected wastewater flow for the BOA Plan recommended land uses and potential projects at full implementation are considered to be equal to the projected domestic water demand as described above. These projections are summarized accordingly:

BOA Projected Average Daily Flow:	225,600 GPD	(0.226 MGD)
BOA Projected Maximum Daily Flow:	451,200 GPD	(0.451 MGD)
BOA Projected Peak Hourly Flow:	627 GPM	(peak factor 4.0 and 1,440 min./day)

The character of the wastewater is normal sanitary wastewater. There are no anticipated flows from new industrial or manufacturing facilities.

Based on the projected wastewater flow the BOA plan will not have a significant impact on the Kingston public sanitary sewer system. This assessment is based on the following findings:

BOA SANITARY SEWER FACILITIES

- The BOA existing wastewater collection and conveyance system is primarily based on four pump stations. Individual development proposals must include an analysis of the capacity of the receiving pumping facilities and potential upgrades or modifications.
- Existing 15" gravity sewers on East Strand Street have excess nominal capacity to accommodate projected flows. Specific components of the existing sanitary sewer system may be at obsolete (service life). Required upgrades and replacements can occur parallel with public street improvements and individual development projects.
- All new utility facilities shall be designed and built to required flood proofing standards and codes.

KINGSTON WWTF

- The Kingston WWTF captures 89% of wet weather combined sewer flows for full treatment.
- WWTF Current Permitted Capacity: 6.8 MGD (million gallons per day) 12-month rolling average.
- The regulated peak wet weather flow into the WWTF is targeted at approximately 10.5 MGD.

- For the period from January 2011 to July 2014 the WWTF received and treated an average of 5.8 MGD (actually daily average flow of 5.2 MGD plus one standard deviation of 0.6 MGD). This includes the additional wet weather flow from the significant weather events of hurricanes Irene in 2011 and Sandy in 2012.
- Based on the current average daily flow the plant normally operates at below its permitted capacity.
- The ability of existing Kingston WWTF to accept additional flows from proposed developments must be evaluated for each individual project at the time of application.
- The City is committed to ongoing WWTP improvements, replacements and upgrades to be implemented at the facility in the next 20 years to maintain plant capacity and expand capacity for future development.
- The WWTF operation is not currently under consent order or moratorium and operation is generally in compliance with the SPDES Permit.

COMBINED SEWER OVERFLOWS:

- Based on CSO water quality monitoring conducted in 2014 it was concluded that Rondout Creek was not impaired or precluded from meeting the applicable Water Quality Standards for Class C waters.
- Incorporate specific planned measures by the City for managing Combined Sewer Overflows within required water quality standards

ENVIRONMENTAL REMEDIATION OPPORTUNITIES

With the exception of Block Park, each of the Strategic Sites includes some level of known environmental condition. Potential impacts resulting from the proximity to, or disturbance of, known existing contaminated sites located within the BOA are presented below for each of the Strategic Sites. Available environmental investigations and determinations were reviewed and considered as they relate to the Strategic Sites. The proposed future land use(s) will dictate the level of remediation and therefore clean-up cost. The next step in the redevelopment process for the Strategic Sites would be to obtain funding to perform the next level of environmental study or remediation planning to determine the nature and extent of clean up necessary to allow the preferred redevelopment scenarios.

KOSCO ASSEMBLAGE

As presented above in the Strategic Sites-Known Environmental Conditions and in Section 4 (Background - Environmental Setting), contamination identified at the KOSCO site includes:

- Surface and subsurface petroleum products;
- · Petroleum products detected in groundwater, and
- Metals found in groundwater.

The proposed redevelopment plan includes parking, a waterfront promenade, and low-rise buildings. Construction activities associated with the low-rise buildings, including excavation work for the building foundation/basement, would disturb surface and subsurface soils and groundwater. Any potential soil disturbance associated with the redevelopment activities of the parking lot and promenade would also require further investigation. As presented in the Step 2 Nomination, a Phase II Site Assessment will be necessary to proceed with redevelopment.

THE LANDING

As presented above in the Strategic Sites-Known Environmental Conditions, Section 4, and the Step 2 Nomination, contamination identified at The Landing site includes:

- VOCs in soil and groundwater;
- SVOCs in soil and groundwater;
- · Metals in soil and groundwater;
- VOCs in air;
- PAHs in surface soil, and
- Unknown fill material.

Preferred redevelopment for the site includes a single two to three story building consisting of a mixed-use trolley terminal with retail and cultural space. The construction activities associated with redevelopment of the building, including excavation activities for the building foundation/basement would disturb surface and subsurface soils and groundwater. Per the Step 2 Nomination, there is the potential that onsite VOC contamination could contribute to VOC vapor intrusion issues associated with any future site buildings.

As presented in the Step 2 Nomination, a Phase II Site Assessment will be necessary to better identify areas of contamination to proceed with redevelopment. Once the areas and degree of contamination are better identified, clean-up procedures would need to be developed and the site remediated to the required standards necessary to accommodate the preferred future site development.

MILLENS & SON SCRAP METAL RECYCLING

As presented above in the Strategic Sites-Known Environmental Conditions, Section 4, and the Step 2, contamination identified at the Millens site includes:

- PCBs in surface and subsurface soils;
- PAHs in surface samples;
- Metals in subsurface soils;
- VOCs in subsurface soils;
- SVOCs in surface and subsurface soils;
- VOCs in groundwater;
- Metals in groundwater, and
- MTBE in groundwater.

Potential redevelopment for the site is to combine with adjoining properties to create a destination 40 key eco-hotel site. The construction activities associated with the redevelopment option would impact surface soil, subsoil and groundwater. The site is currently under NYSDEC consent and clean-up actions are being determined. Also, removal of the condemned housing would be necessary and any contamination associated with the housing would need to be identified. A plan for removal would need to be developed based on any identified contamination hazards and measures would need to be taken to avoid to the extent possible or minimize any impact during removal.

As per the May 2015 Citizen Participation Plan, once the Interim Remedial Measure is complete, NYSDEC will determine if any additional remedial actions are needed. If it is decided that additional cleanup action is needed, the project will proceed to designing and performing cleanup to address identified contamination issues. Upon completion of the cleanup action, NYSDEC will then approve or prepare a final engineering report detailing any needed additional cleanup requirements or stating that cleanup requirements have been met. Once the final engineering report is approved, the NYSDEC would issue a Certificate of Completion which would acknowledge the cleanup actions have met required cleanup levels with specific categories of use for the site. The final phase of cleanup would be Site Management. A Site Management Plan would be prepared to include significant activities. During this phase, NYSDEC may reclassify or remove the site from the Registry. The proposed redevelopment option for the site would need to be revisited upon completion of the Site Management Plan.

BLOCK PARK/ISLAND DOCK

Block Park

Section 4 (Known Environmental Conditions) and the Step 2 Nomination note that there are some drums and other materials located on Block Park that should be removed. However, the City does not have any records of drums or any materials stored at the site.

The preferred option for Block Park is a land swap involving the privately held land at Hideaway Marina and Island Dock/former Block Plant. This would result in redevelopment of the mainland (Block Park) primarily for residential use with ground floor retail.

Impacts to groundwater or soils are not likely because has been no identified contamination at Block Park and therefore, no mitigation measures are presented. However, if residential uses are proposed at this site it is recommended that an ESA be done at this Strategic Site.

Island Dock

As presented above in the Strategic Sites-Known Environmental Conditions, Section 4, and the Step 2 Nomination, and Phase I and Phase II investigations, contamination identified at the Island Dock site includes:

- VOCs in surface soil;
- SVOCs in surface soil;
- Metals in surface soil.

The preferred option for Island Dock (approximately 17 acres of uniquely scenic undeveloped land with 6500 running feet of vessel accessible waterfront perimeter) is that be purchased by the City of Kingston, possibly with the participation and/ or assistance of an intermediate entity or entities, to be developed for public usage. A possible sale of Block Park (approximately 7 acres) by the City of Kingston to a private developer might generate some of the necessary funding for such an acquisition. Existing trees would be preserved and small clearings created where

sculptural art can be displayed. At the eastern tip of the island, a small amphitheater is proposed. The softball diamond could be relocated to the south west corner of the parcel and parking lot with pavement would be located adjacent to it as vehicular traffic is restricted from Island Dock. A pedestrian bridge would connect the island to Hone Street on the mainland.

Per Phase II, the extent of VOC impacts has not yet been fully characterized. To minimize impacts, limited testing is warranted to determine the extent of any VOC contamination. The most likely remediation plan at Island Dock will be installation of a membrane covered with soil capping.

NOAH HOTEL

As presented above in the Strategic Sites-Known Environmental Conditions, Section 4 (Known Environmental Conditions), and the Step 2 Nomination, and Phase I and Phase II investigations, contamination identified at the Noah Hotel site includes:

 Unknown petroleum related to a former spill. However, the spill was closed and at this time, there is there are no additional environmental records or known environmental investigations related to this site.

The preferred option is a hotel with frontage and access on both the upper level. An additional two to four story commercial building will be co-located on the site for office space and to support industry. A series of public spaces consisting of terraced landscape areas would be located between the two buildings to create a green connection between the upper and lower levels and a municipal garage with parking would be designed into the hillside. Construction activities associated with the hotel and associated buildings and excavation activities associated with the hillside parking garage would disturb surface and subsurface soils and groundwater.

A Phase II investigation would be recommended to identify any petroleum contamination onsite prior to any redevelopment activities. If any contamination is identified, clean-up procedures would need to be developed and the site remediated to the required standards necessary to accommodate the preferred future site development.

TEMPORARY AND SHORT-TERM IMPACTS

Implementation of the BOA Plan will result in possible temporary and short-term impacts stemming from the potential construction activities related to project-specific activities at the Strategic Sites. These may include temporary impacts from to site runoff in stormwater, noise, dust and odor and during remediation of contamination.

STORMWATER

During construction of individual projects implementing the build-out of the Hudson Riverport Vision Plan, there will be potential for degradation to surface water quality from uncontrolled runoff carrying eroded soils and possible contaminants into Rondout Creek and the Hudson River. Individual Stormwater Pollution Prevention Plans (SWPPP) will be required for coverage under the NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit (GP-0-15-002) for the treatment and management of Stormwater Discharges from Construction Activities associated with development of the Project that disturbs 1 acre or more. The purpose of the SWPPP is to prevent erosion at construction sites and sedimentation of downstream water courses. The SWPPP for each project will outline temporary erosion and sedimentation control measures, as well as permanent stormwater management practices for runoff reduction, water quality treatment and regulation of discharge rate and volume.

Mitigation measures identified in the Preliminary SWPPP include but are not limited to the following temporary and permanent erosion control/slope stabilization practices:

- Silt fence;
- Stabilized Construction Entrance;
- · Check Dams;
- Temporary stockpiling of topsoil, gravel, backfill, etc.;
- Initiating soil stabilization measures as soon as practical, and
- Best Management Practices (BMPs) for spill prevention and solid waste management.

NOISE

Given the ambient conditions in the existing urban setting of the BOA, impacts from noise are anticipated to be limited to short-term construction related noise. Remediation and redevelopment activities at the Strategic Sites may result in temporary and short term increases in noise levels associated with construction equipment such as backhoes, compactors, bulldozers and trucks. Noise produced by heavy equipment will vary throughout the day and during the entire construction period. During a typical work shift, construction equipment may be idling while preparing to perform a task or operating at maximum capacity. As a result, construction, operation, and hauling vehicle sound levels will vary. Average construction sound levels over a full construction work shift are expected to be considerably lower than peak levels. Once construction is complete, there would be an increase in noise levels from vehicular traffic and building operations associated with new facilities on the property.

Through the site plan review of each proposed development, the City has the ability to ensure there are adequate distances and landscaping to provide noise buffers between the specific site developments and adjoining parks/open space, residential or commercial properties.

Operation of heavy equipment during the construction phase of development would be temporary and restricted to typical day time work hours. Managing the hours at which the loudest of the operations can take place can provide additional mitigation of construction noise.

DUST

During construction of the individual implementation projects, dust and exhaust will be generated by construction activities and equipment. These impacts will be temporary in nature, however, and will not occur over prolonged periods of time. Construction impacts related to dust will be mitigated through best management practices including but not limited to:

• Requiring contractors to only use heavy equipment that is in proper working condition and fitted with all applicable safety, noise and emission equipment.

- Where applicable, typical construction dust suppression techniques will be employed such as watering of construction roadways and work areas as necessary to reduce fugitive dust from being transported off-site.
- Limiting on-site travel speeds.
- Installing stabilized construction entrances off of existing roads to avoid vehicle tracking dirt and mud onto areas roadways.

ODORS

Temporary impacts from odors resulting from clean-up of contaminated soils or groundwater at the Strategic Sites may occur during the implementation of the Hudson Riverport Vision Plan. The nature and intensity of odors will depend on the type and amount of contamination documented in future investigations. Therefore, mitigation of odor impacts will be addressed in the site-specific remedial action work plan that must be prepared for each site prior to clean-up activities.

UNAVOIDABLE ENVIRONMENTAL IMPACTS

The BOA Plan is designed to properly guide redevelopment of the Strategic Sites in a manner that lessens the potential negative impacts resulting from land use changes and development activities. The BOA Plan provides the City an opportunity to plan adequately and provide the proper tools to manage the preferred growth and redevelopment in the BOA; reducing the likelihood of potentially significant adverse environmental impacts.

The majority of the identified impacts from the BOA Plan will be sufficiently minimized through the Design Strategy, or where appropriate, mitigated. Therefore, it is not anticipated that implementation of the Hudson Riverport Vision Plan (as proposed) will result in significantly adverse impacts that cannot be mitigated.

All development actions taking place after the adoption of this BOA Plan and Generic EIS will still be subject to the SEQRA process on a site specific basis. Nothing contained in this document supplants the necessity of adequate environmental review of future actions. However, this BOA Plan will be a resource that can be used to facilitate the review under SEQRA of future development actions.

COMMITMENT OF RESOURCES

Implementation of the Kingston Riverport Vision Plan will require the irreversible and irretrievable commitment of certain human, material, natural, and financial resources, as described below. For the most part, commitments of these resources will be offset by the benefits that will result from implementation of the Project. Although a full range of site design features and environmentally-sound mitigation measures will be implemented to minimize these commitments, some resources will become unavailable for future use.

HUMAN RESOURCES

Human resources will be committed in order to develop the identified projects in the future. In order to design, permit, construct and operate the new facilities, labor will be necessary. Workers employed for design and construction will be unavailable for other construction projects during the same time frame.

ENERGY & MATERIAL CONSUMPTION

Energy resources also will be irretrievably committed to the Project, during both the construction and operation of future redevelopment projects. Fuel, lubricants, and electricity will be required during site preparation and construction activities for the operation of various types of construction equipment and vehicles, and for the transportation of workers and materials to project sites.

Various types of construction materials and building supplies will also be committed to future redevelopment projects; to a lesser extent for reuse of existing buildings. The use of these materials, such as gravel, concrete, steel, etc., will represent an irreversible commitment of these resources.

NATURAL RESOURCES

Implementation for the Hudson Riverport Vision Plan represents a commitment of land for the life of the development projects. Approximately 44 acres of currently vacant or underutilized land would be converted to impervious surfaces such as buildings, roads, and parking lots. However, given that the majority of the Strategic Sites have been intensively developed in the past and are no longer in natural state, the net loss of natural resources will be minimal. Redevelopment of the Island Dock as a park and passive open space will facilitate permanent naturalization of that area. Design Strategies in Section 6 of the BOA Plan emphasize redevelopment utilizing resilient and low impact design in order to minimize the negative impacts on natural resources. Therefore, implementation of the Hudson Riverport Vision Plan is not anticipated to result in significant negative environmental impacts to the existing natural resources within the BOA.

FINANCIAL RESOURCES

Financial resources have already been and will continue to be expended by the private landowners, City of Kingston, DEC and DOS for the development of BOA Step 2 Nomination and Step 3 studies, environmental investigations and remediation to-date. The expenditure of funds and human resources will continue to be required throughout the design, permitting and construction phases of future redevelopment projects (e.g., for environmental reviews and permitting, site plan approval, remediation, and construction).

Development capital expenditures refers to the costs associated with construction including engineering, financial, legal and other professional services, labor and materials, and financing. Included in these costs are the premiums for insurance and other risks that are part of any type of construction/development venture. The commitment of these resources makes them unavailable for other uses.

There will also be costs associated with the daily operations of the facilities. The commitment of these monetary resources to operate and maintain the site facilities makes them unavailable for other uses. However, the redevelopment of the catalyst projects at the Strategic Sites is anticipated to create additional economic development opportunities (see Section 4)

GROWTH-INDUCING ASPECTS

The Kingston Waterfront BOA represents a currently underutilized portion of the City. Many of the former industrial uses are no longer operating and the land and facilities are vacant and potentially available for redevelopment. The underlying purpose of the BOA program is to identify vacant, underutilized or abandoned brownfield sites for plan for their remediation and redevelopment. This BOA Plan has selected five Strategic Sites whose redevelopment would serve as catalysts for further revitalization of the waterfront area.

Therefore, implementation of the BOA Plan is intended to be growth-inducing; primarily Commercial/Retail/Office, Mixed-Use Commercial/Residential, and enhancements to parks and open space. The existing zoning of the BOA study area allows the majority of the recommended preferred land uses and development scenarios.

It is anticipated that secondary growth resulting from redevelopment of the Strategic Sites will not result in significant adverse impacts for the following reasons:

- The Proposed Action is not likely to result in significantly different land uses or at greater densities than would be allowed under existing zoning if the area were to build out without the benefit of the BOA Plan.
- The anticipated 426 of new residential units represents an increase of 3% of the total housing units projected for 2033 in the City.
- The design strategies outlined in this BOA Plan will help to control and better direct growth within the waterfront area.
- Implementation of the larger cohesive vision plan will be incremental. The phasing
 intends for the long-term vision to guide decisions and allow markets to be established
 to absorb later and larger developments.
- Where necessary, environmental cleanup will be designed and conducted in accordance with applicable NYSDEC guidance and precede development activities. The proposed future land use(s) will dictate the level of remediation and therefore clean-up cost.
- The design strategies include resilient designs and sustainability.

Potential positive impacts from the Proposed Action include:

- The Proposed Action will generate new job opportunities which potentially will be filled by residents of the City and Ulster County.
- The Project will provide secondary economic benefits to local vendors and suppliers used for construction, by future employees and by visitors.
- An increase in City and County property taxes generated by implementation of the Hudson Riverport Vision Plan has the potential to drive local property tax rates lower.
- New businesses can have a multiplier effect in the larger local economy. A multiplier can be used to summarize the total impact to be expected from an economic activity (e.g., the presence of a manufacturer or service industry). Economic multipliers usually range between 1.0 and 3.0 and vary by the amount of economic activity within an area and the interaction of industries within the area. While the value of a multiplier associated with the Proposed Action has not been calculated, considerable economic value is created and distributed as a result of bringing one or more new businesses into an area. An illustration of the economic ripple effect might include a new employee who spends his/her wages locally on goods or services provided by a local vendor who in turn spends their earnings on goods and services provided by another local vendor.

EVALUATION OF ALTERNATIVES

PREFERRED ALTERNATIVE

The Hudson Riverport Vision Plan is the preferred alternative for the redevelopment of the Kingston Waterfront BOA. The design elements of the BOA Plan are described in detail in Section 6 (Design Strategy) and 8 (Project Description/Proposed Action). This section satisfies the SEQRA requirement for an evaluation of reasonable alternatives stated in 6NYCRR §617.9(b)(5)(v).

Where sufficient information is known, potential impacts have been identified; assessed to the extent possible; and where appropriate, mitigation measures have been identified in Section 8. The following provides a summary of the potential short term and long term environmental impacts likely to occur if the preferred alternative is built-out.

IMPACTS TO LAND USE

The most significant impact to land use will be the permanent conversion of 40 acres of land from its current vacant condition to residential, mixed-use residential/ commercial, and parks/open space. Impacts to land use for the preferred alternative are positive in nature. No mitigation will be necessary.

IMPACTS FROM FLOODING

The majority of the BOA lies in the Floodway Fringe, or the area of allowable encroachment. According to the FIS and FEMA standards, development could occur in the Floodway Fringe without increasing the 1% Base Flood elevation more than 1.0 foot. However, (re)development in the Floodway Fringe will still be subject to flooding.

Possible mitigation measures include:

- Fortification;
- Accommodation elevation of structures and design for passage of waters. (City Zoning requires new residential and non-residential structures to be elevated to at least 2 feet above the effective BFE elevation of 8.2, resulting structure elevation 11.2.);
- Relocation;
- Zoning modification;
- Fringe land filling, and
- Flood barriers and levees (not appropriate for all sites).

Depending on the location and detailed design of project-specific structures, the potential for impacts from flooding remains for any alternative that include redevelopment of the strategic sites.

IMPACTS TO HISTORIC RESOURCES

Direct effects to historic structures may include renovations and improvements to historic structures located at the Strategic Sites or elsewhere in the BOA. As presented, the preferred plan does not directly impact any historic structures. However, Island Dock is a unique property and the Noah Hotel site is located in a NRHP- registered historic district. Therefore, future development on those sites may require additional consultation with the OPRHP once project-specific plans are proposed.

IMPACTS TO ARCHAEOLOGICAL RESOURCES

The entire BOA is located in an area(s) designated as archaeologically sensitive. Therefore, once project-specific plans are proposed further consultation with OPRHP will be required as part of future project-specific SEQRA assessment(s).

VISUAL IMPACTS AND IMPACTS TO AESTHETIC RESOURCES

There would be little to no visual impact of the redeveloped sites to the existing scenic waterfront. The redevelopment designs of the Strategic Sites include strategies to add additional greenspace and enhance the aesthetics of the waterfront, offering an overall aesthetic improvement at each of the Strategic Sites.

Once project-specific designs are proposed, it is anticipated that a more detailed assessment of the visual impacts from any redevelopment project over 1 - 2 stories should be done as part of the site plan and SEQRA reviews.

IMPACTS ON OPEN SPACE AND RECREATION

- Improvements in access and boardwalks at Kingston Point Park (positive impacts).
- The possible purchase of Island Dock by the City of Kingston with the help of intermediate entities could result in a net increase of 24 acres of parkland.
- The capitol costs to re-locate/re-build the existing park facilities.

IMPACTS ON TRANSPORTATION

- Prior to future development of the BOA projects, a more complete assessment of the transportation systems will need to be completed.
- Proposed improvements such as a trolley service and Kingston Greenline will create a network of urban trails, complete streets, bike lanes and linear parks in the City of Kingston to lessen the impact of vehicular traffic.
- Improvements will be needed to existing road network to accommodate accessible pedestrian accommodations and reduce traffic impact.

IMPACTS TO INFRASTRUCTURE

- Based on the projected domestic water demand the BOA Plan will not have a significant impact on the Kingston public water system.
- Based on the projected wastewater flow the BOA Plan will not have a significant impact on the Kingston public sanitary sewer system.
- Based on CSO water quality monitoring conducted in 2014 it was concluded that Rondout Creek was not impaired or precluded from meeting the applicable Water Quality Standards for Class C waters.

IMPACTS FROM CONTAMINATION

- Varying degrees of contamination has been detected at most of the Strategic Sites.
 Prior to future redevelopment activities, additional environmental studies are anticipated to be needed at most of the Strategic Sites.
- Prior environmental studies have indicated that suspect asbestos containing materials may be present in structures as some of the strategic sites. Suspect materials should be sampled and managed in accordance with all applicable New York State and Federal laws and regulations prior to any building demolition, renovation, or other invasive building activities.
- Prior to future redevelopment activities, remediation of most of the Strategic Sites may be needed.

"NO ACTION" ALTERNATIVE

Consideration of the No-Action Alternative establishes a baseline for assessing the relative impacts and benefits of the proposed action. The discussion of the No-Action Alternative is intended to describe and evaluate the adverse and/or beneficial impacts that are likely to occur on the site and in the community in the absence of the Proposed Action.

The No-Action Alternative means that the Proposed Action (implementation of the BOA Plan) would not occur. Under this scenario, the City, State and development agencies would not promote to the same degree the funding and implementation of the preferred redevelopment strategies. Therefore, a coordinated redevelopment of the BOA is less likely to occur, and

- Strategic Sites are more likely to remain vacant and underutilized.
- The visual setting would remain the same.
- Environmental benefits that would result from remediation of the brownfields are less likely to occur.
- Potential economic benefits anticipated from revitalization activities and new business employment is less likely to result.

ALTERNATIVE SIZE AND SCALE

Section 6 (Design Strategies) presents design alternatives for each of the Strategic Sites.

THE KOSCO ASSEMBLAGE

The alternative would have 15,000 SF less total development and no residential units and no buildup of shoreline. There would be less development water side of the trolley tracks. Because there would be a smaller total developed area there would be less traffic, or demand for public utilities.

THE LANDING

The alternative design would have a smaller foot print of only 35,000 SF and more landscaping with boardwalk access to the water. Because there would be a smaller commercial footprint the alternative design may result in less traffic or demand for public utilities.

MILLENS

The alternative design for the Millens site would not include assemblage with the adjoining property. Instead of a hotel development the site would be utilized as a small scale (20,000 SF) civic and event destination with supporting classroom space. There would be less wetland impacts, and because there would be a smaller footprint, the alternative design may result in less traffic or demand for public utilities.

BLOCK PARK/ISLAND DOCK

Under the alternative design, there would not be a land purchase by the City of Kingston. Block Park would remain a City–owned park with no proposed changes. Island Dock and the former Block Plant would remain privately held and available for development as a small-scale mixed-use community of 650,000 SF including 400 residential units. The alternative would result in less visual change at Block Park, but more visual impact from greater building heights on Island Dock. Development on Island Dock would require greater demand for public utilities and create transportation challenges due to its limited street access.

NOAH HOTEL SITE

The alternative design would eliminate the hotel and have separate upper and lower level development pads. The upper level development is reserved to small scale residential on Abeel Street. The lower level development is retail that focuses on the recreation boaters and flexible work space/office space.

The commercial footprint would be smaller with 125,000 SF and 40 housing units. Because there would be a smaller footprint the alternative design may result in less traffic or demand for public utilities.

ALTERNATIVE USES OF THE STRATEGIC SITES

With or without the adoption and implementation of this BOA Plan, the City will likely still receive independent proposals for redevelopment of the privately held properties located within in the BOA; although not in the same coordinated or complimentary manner as proposed in the Hudson Riverport Vision Plan.

Alternative uses that would be allowed in the BOA are controlled by the zoning. The BOA Plan does not recommend land uses that are significantly different than those land uses allowed by the current zoning. Therefore, the build-out of the BOA without the benefit of the BOA Plan is likely to result in similar land uses as recommended by the Plan. One exception is the BOA Plan does not emphasis manufacturing or processing of products as allowed in the General Manufacturing District (M-2).

As brownfield, vacant and underutilized properties are redeveloped, it is anticipated that existing non-conforming land uses in the BOA will be replaced by uses currently permitted in zoning and recommended by the BOA Plan.

It is not anticipated the implementation of the BOA Plan would result in impacts significantly different than if the waterfront area is redeveloped with land uses allowed under the current zoning. However, the adoption of this BOA Plan will facilitate the City's ability to better manage growth and redevelopment, and reduce potential environmental impacts.

THRESHOLDS FOR FUTURE SEQRA REVIEW

Because this BOA Plan and SEQR assessment serves as a Generic EIS, it is broader and more general than a conventional EIS. The intent is to set forth specific conditions for future subsequent review and SEQRA compliance during the review and approval process of individual redevelopment activities that will implement the Hudson Riverport Vision Plan (the BOA Plan).

Thresholds and criteria for future review are established to help ensure that private development proceeds in accordance with the BOA Plan. This may include thresholds and criteria for supplemental EIS's to reflect site-specific impacts that cannot adequately be addressed at this time in the BOA Plan/DGEIS.

LAND USE

The Hudson Riverport Vision Plan established preferred land use patterns that generally fit into existing zoning. If future project-specific proposals for the redevelopment of the Strategic Sites do not meet the specific permitted uses in the current zoning code, or exceed the preferred land use plan, then the proposed development may not have been adequately considered in this assessment and a new project-specific SEQR assessment should be undertaken.

It is not the intent of this BOA Plan to encourage or support projects that are substantially inconsistent with the Kingston 2025: Comprehensive Plan, 2015 or the Local Waterfront Implementation Plan, 2002. If future project-specific proposals for the redevelopment of the Strategic Sites are substantially inconsistent with the Comprehensive Plan or Local Waterfront Implementation Plan, then the proposed development may not have been adequately considered in this assessment and a new project-specific SEQR assessment should be undertaken.

NATURAL RESOURCES

Proposed implementation projects should not be located within a designated State or Federal wetland or within a 100' buffer of a State wetland. Projects should be designed to avoid the wetland to the maximum extent possible or minimize the footprint; if not, wetland mitigation would most likely be required. Future project-specific proposals that impacts wetlands to the extent that require permitting or mitigation may not have been adequately considered in this assessment and a new project-specific SEQR assessment should be undertaken.

Development in the floodway fringe is an allowable permitted use according to FEMA minimum standards. If project-specific proposals are not designed to meet the following conditions, then they should be subject to a new project-specific SEQR assessment:

- Development in the floodway fringe must be designed to incorporate appropriate flood proofing measures.
- Redevelopment activities are subject to the requirements of Local Law Section 405-26. Specifically, all new residential and non-residential structures shall be designed in accordance section 405-26.G.
- Individual development proposals should consider the strategies and recommendations of the City of Kingston Tidal Waterfront Flooding Task Force from their final report dated 9/18/2013.
- Individual development proposals should consider the recommendations and criteria in the East Strand Street Flooding and Stormwater Management Analysis final report dated 2/19/2014.

• The planning criteria for future Sea Level Rise for new development should be consistent with the anticipated life of the proposed new facilities.

CULTURAL RESOURCES

Additional consultation with the OPRHP will be required for future site-specific redevelopment projects that include ground disturbance or are located in Rondout Creek and/or the Hudson River. Consultation with OPRHP should be undertaken early in the design and application process and will need to be documented as part of any future project-specific SEQRA assessment(s).

VISUAL IMPACTS

Once project-specific designs are proposed, an assessment of potential visual impacts should be required for each project proposing structures over 1-2 stories. The visual impact assessment may include viewshed analysis to determine where the new development will be visible from and line-of-sight diagrams to facilitate an assessment of their level of impact

OPEN SPACE AND RECREATION

It is anticipated that implementation/full build-out of the BOA Plan will impact publiclyowned parkland or open space, including Block Park/Island Dock, and Kingston Point Park/Kingston Beach. The proposed land swap of Block Park for Island Dock/former Block Plant, will require legislative approvals and implementation costs not completely addressed by this SEQR assessments and should be subject to further review under SEQR.

TRANSPORTATION

As project-specific proposals are made for the redevelopment of the Strategic Sites, a more complete assessment of their potential impact to the transportation systems will need to be completed. A typical threshold to determine when a project will require a Transportation Impact Analysis is if the proposed development adds 100 vehicles in the adjacent roadways' peak hour traffic generation or the development's peak hour traffic generation exceeds 100 vehicle trips and/or requires infrastructure improvements to public streets or roads including traffic control devices.

INFRASTRUCTURE

- Water: Individual projects that require public infrastructure improvements to deliver adequate water supply to the site to support the project.
- Wastewater: Individual projects that generate wastewater of a volume, rate, or composition that exceeds the capabilities of the local Municipal sanitary sewer system and/or Publicly Owned Treatment Works.
- Stormwater: Individual projects which involve soil disturbance of 1 or more acres will be subject to the Federal, State and local requirements for stormwater discharges. Eligibility under the SPDES General Permit for Stormwater Discharges from Construction Activities may not be applicable to all BOA redevelopment projects. If not, then projects may require an individual SPDES permit, as well as other Federal, State and local permits.

DGEIS REFERENCES AND UNDERLYING STUDIES

Brownfield Opportunity Areas Program – Guidance for Applicants, New York State Department of State and New York State Department of Environmental Conservation, October 2008

Kingston 2025: City of Kingston Comprehensive Plan, City of Kingston, Shuster-Turner, January 11, 2015.

"NYS Traffic Data Viewer", New York State Department of Transportation, accessed August 2015, https://www.dot.ny.gov/tdv

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