

## Foreword

This Draft Scope of Work (DSOW) to Prepare a Targeted Environmental Impact Statement (EIS) is a revised version of the DSOW originally published on February 21, 2024 and discussed during a March 7, 2024 virtual public scoping meeting. Due to technical difficulties experienced during the March 7, 2024 virtual public scoping meeting, a second public scoping meeting will be held as a hybrid event (i.e., simultaneously in-person and virtual) on May 16, 2024. Per SEQRA regulations, this second scoping meeting and availability of revised versions of the DSOW, EAF, and Supplemental Report was noticed on the New York State Department of Environmental Conservation’s (NYSDEC) Environmental Notice Bulletin (ENB) and in local newspapers on May 1, 2024. Additionally, as indicated on the following table, since the March 7, 2024 virtual public scoping meeting, the New York City School Construction Authority (SCA) has modified the proposed project’s programming. These changes are outlined in the table below. In order to indicate changes made to the DSOW since initial publication, deleted text is shown with ~~strike through~~ and new text are shown with double underline.

	<b>2/21/2024 Publication</b>	<b>5/1/2024 Publication</b>	<b>Increment/Change</b>
School Type	The proposed project was described as including a PS and a shared intermediate/high schools IS/HS facility.	The proposed project now comprises three new schools that would consist of a Gifted and Talented primary school/intermediate school (PS/IS) and a shared facility for two separate, independently operated IS/HS.	The PS is now a Gifted and Talented PS/IS. The IS/HS is now described as two-separate schools in a shared facility.
# of Seats	Total: 1,990 <i>PS: 736 IS/HS (two schools): 1,254</i>	Total: 2,114 <i>PS/IS: 764 IS/HS (two schools): 1,350</i>	Total: +124 <i>PS/IS: +28 IS/HS (two schools): +96</i>
# of Staff	Total: 244 <i>PS: 96 IS/HS (two schools): 148</i>	Total: 257 <i>PS: 99 IS/HS (two schools): 158</i>	Total: +13 <i>PS: +3 IS/HS (two schools): +10</i>
Building Gross Square Footage (gsf)	Total: 281,942 gsf <i>PS: 92,303 gsf IS/HS (two schools): 165,739 gsf Chapel Building: 21,700 gsf Maintenance Building: 2,200</i>	Total: 307,761 gsf <i>PS/IS: 96,381 gsf IS/HS (two schools): 186,405 gsf Chapel Building: 21,700 gsf Maintenance Building: 3,275 gsf</i>	Total: +25,819 gsf <i>PS/IS: +4,078 gsf IS/HS (two schools): +20,666 gsf Chapel Building: No change Maintenance Building: +1,075 gsf</i>
Play Yard	5,600-gsf play yard associated with the PS	16,000-gsf play yard associated with the PS/IS	+10,400 gsf
Construction Schedule	72 months	70 months	-2 months
Site Plan	Refinements to the site plan are reflected in Figure 2, “Conceptual Site Plan.”		
*Note: In addition to the changes outlined in this table, this DSOW also reflects editorial revisions made since the 2/21/2024 publication.			

**Proposed Redevelopment of the former St. John Villa Campus  
at 57 Cleveland Place (Richmond County)**  
**Draft Scope of Work to Prepare a Targeted Environmental Impact Statement**

**A. Introduction**

On behalf of the New York City Department of Education (DOE), the New York City School Construction Authority (SCA) proposes to create ~~three~~ two new school facilities, ~~including an approximately 736-seat primary school (PS) and a shared facility for two, approximately 627-seat intermediate/high schools (IS/HS); and an athletic field with an approximately 700-seat bleacher section, a maintenance building, an internal driveway network, and a parking lot (the “proposed project”) on the former St. John Villa campus at 57 Cleveland Place in the Arrochar section of Staten Island (Richmond County) (see Figure 1, “Project Location”).<sup>1</sup> The three new schools would consist of an approximately 764-seat Gifted and Talented primary school/intermediate school (PS/IS) and two separate, independently operated, approximately 627-seat intermediate/high schools (IS/HS). The two IS/HS would also contain 96 seats for a District 75 program and share a gymnasium, auditorium, and lobby. The proposed project would serve students in grade levels pre-kindergarten through twelve and The proposed PS/IS would serve students in grade levels pre-kindergarten through eight throughout New York City. Each IS/HS school would serve students in grade levels six through twelve in the Borough of Staten Island. All three schools would also serve special education students enrolled in a District 75 program<sup>2</sup> in the Borough of Staten Island. Pursuant to the New York State Environmental Quality Review Act (SEQRA), codified in Article 8 of the Environmental Conservation Law, and its implementing regulations (6 NYCRR Part 617), on behalf of the DOE, the SCA intends to prepare a Targeted Environmental Impact Statement (EIS) for the proposed project. The SCA is proposing to serve as the Lead Agency for SEQRA.~~

The proposed PS/IS facility would be constructed as a stand-alone structure on the southwestern portion of Block 3087, Lot 1 fronting Landis Avenue (see Figure 2, “Conceptual Site Plan”). The proposed shared IS/HS facility for two IS/HS would be another stand-alone structure on the northeastern portion of Block 3087, Lot 1 with frontage on Garson Avenue. The proposed athletic field would be constructed on the southeastern portion of Block 3087, Lot 1 fronting Narrows Road South and Hastings Street. A maintenance facility would be constructed at the southern end of Block 3087, Lot 1 with frontage on Hastings Street. A staff parking lot would be provided on Block 3089, Lot 59 along Cleveland Place. An internal driveway network with limited parking spaces would be constructed on Block 3087, Lot 1, and would maintain the existing driveway connections to Garson Avenue, Cleveland Place, Landis Avenue, and Hastings Street while adding a new connection to Narrows Road South.

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<sup>1</sup> The proposed schools would collectively introduce ~~2,114~~ 1,990 new school seats to the project site.

<sup>2</sup> District 75 programs provide Citywide special education services for students in need of intensive or specialized services. The proposed project would include approximately 96 District 75 seats in the proposed PS/IS and approximately 96 District 75 seats in the proposed shared ~~IS/HS~~ facility for two IS/HS, for a total of 192 District 75 seats.

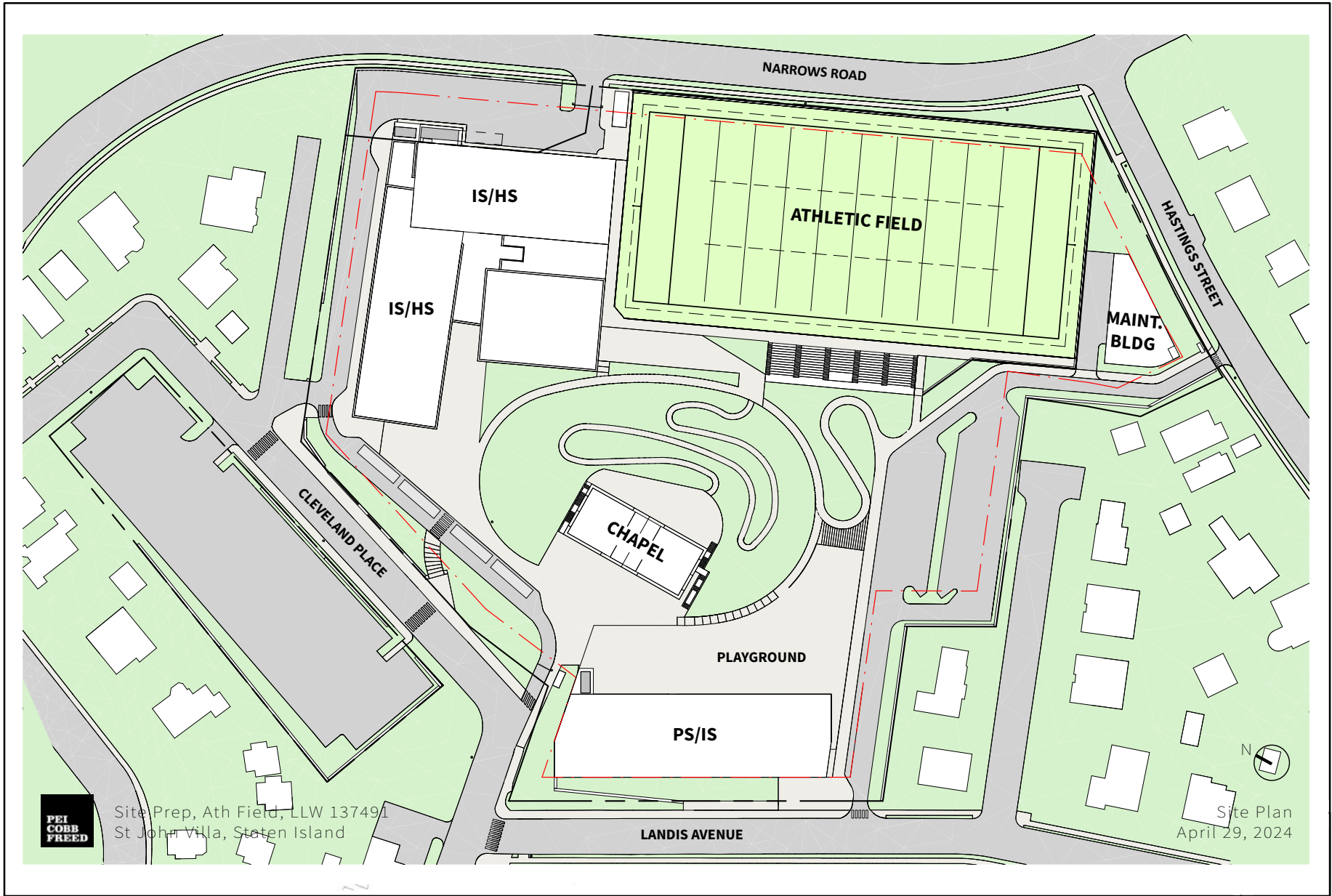


Source: National Geographic Society, i-cubed, 2013; STV Incorporated, 2024.

Figure 1

**Proposed Redevelopment of the former St. John Villa Campus  
57 Cleveland Place, Staten Island**

**PROJECT LOCATION**



Source: Pei, Cobb, Freed, 2024; NYCSCA, 2024; STV Incorporated, 2024.

Figure 2

**Proposed Redevelopment of the  
former St. John Villa Campus  
57 Cleveland Place, Staten Island**

**CONCEPTUAL SITE PLAN**

The project site comprises the former St. John Villa Campus, which was previously occupied by the former St. John Villa Academy, a private, Roman Catholic school that supported educational facilities for grades pre-kindergarten through twelve until its closure in 2018 (see Figure 3, “Aerial View Project Site”). The buildings associated with this former use remain on the project site and consist of a former convent building (“Villa”), Chapel Building, Former Elementary School, Former Annex, Garage, Former High School and Addition, and Former Pre-K Center. The existing buildings are in poor condition and cannot feasibly accommodate the modern school functions that the proposed project is intended to achieve. All but the Chapel Building would be removed in order to construct the proposed schools and athletic field. Given the topography of the site, extensive grading would likely be necessary to accommodate the proposed school facilities.

Funding for site preparation, design, and construction of the proposed project (collectively, “proposed actions”) would be provided by DOE’s Five-Year Capital Plan for Fiscal Years 2025-2029. Construction would be phased beginning in Q4 fall 2024 and would conclude in Q3 fall 2030. Therefore, 2030 is assumed for the analysis year (“build year”).

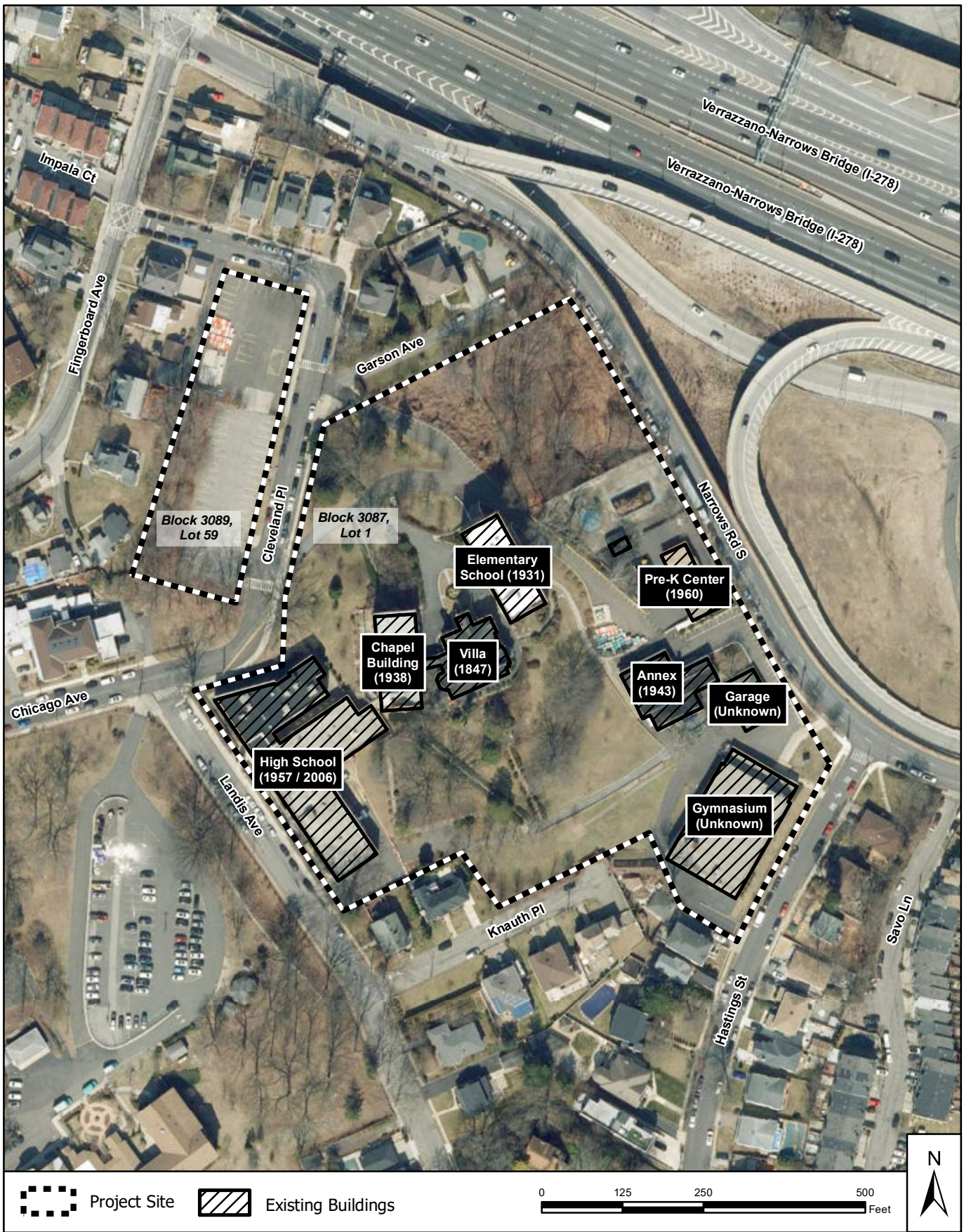
## **B. Project Description**

### *Purpose and Need*

The proposed project's purpose is to provide additional permanent public school capacity in the Borough of Staten Island and thereby New York City as a whole. The DOE Five-Year Capital Plan for Fiscal Years 2025-2029 allocates funding to create additional seats at the primary, intermediate, and high school levels to address forecast changes in future student enrollment and to support DOE's policies regarding class size reduction.

### *Project Site*

The project site is approximately 8.49 acres (370,029-square-foot [sf]) across two tax lots, Block 3087, Lot 1 and Block 3089, Lot 59, on either side of Cleveland Place in Staten Island Community District 2 on the former St. John Villa Campus. The project site is surrounded by institutional uses to the west, residential uses to the north and south, and entrance and exit ramps to the Verrazano Narrows Bridge (I-278) to the east. It is mapped as an R1-2 residential zoning district, in which schools are permitted as-of-right.



Source: NYC Office of Technology and Innovation (OTI); NYC Department of City Planning MapPLUTO 2023 v3; New York State Office of Parks Recreation and Historic Preservation (OPRHP) Cultural Resources Information System (CRIS); ESRI, Maxar, Earthstar Geographics; STV Incorporated, 2024.

**Proposed Redevelopment of the former St. John Villa Campus  
57 Cleveland Place, Staten Island**

**Figure 3  
AERIAL VIEW  
PROJECT SITE**

### Block 3087, Lot 1

Block 3087, Lot 1 is an approximately 7.5-acre (326,927 sf) irregularly shaped lot that comprises the vast majority of Block 3087, bounded by Garson Avenue to the north, Hastings Street and Knauth Place to the south, Narrows Road South to the east, and Cleveland Place and Landis Avenue to the west. This portion of the project site has approximately 325 feet of frontage on Garson Avenue, approximately 235 feet of frontage on Hastings Street, approximately 135 feet of frontage on Knauth Place, approximately 625 feet of frontage on Narrows Road South, approximately 400 feet of frontage on Cleveland Place, and approximately 315 feet of frontage on Landis Avenue. Stone walls and hedges surround the perimeter of this lot, on which stand the majority of the existing elements of the former St. John Villa Campus. The only portion of the former St. John Villa Campus not located on this lot is a parking lot located on Block 3089, Lot 59, which is described in the following section. The elements of Block 3087, Lot 1 consist of:

- Buildings
  - **Villa (1847):** Located in the central portion of the lot, the Villa was originally constructed in 1847 as a private residence and was later modified to serve as a convent for the religious sisters who operated the former St. John Villa Academy. The building is a two-story with cellar, gothic revival structure. Since its construction, the building has been subject to substantial alterations.
  - **Former Elementary School (1931):** Located in the north-central portion of the lot, the Former Elementary School was constructed in 1931. It is a three-story brick building with cast stone trim in the Collegiate Gothic Style, which was commonly used for schools and college buildings from the early 1900s through the 1920s.
  - **Chapel Building (1938):** Located in the central portion of the lot, the Chapel Building was constructed in 1938. It is a three-story brick building with cast stone trim in the Collegiate Gothic Style, which was commonly used for schools and college buildings from the early 1900s through the 1920s.
  - **Former Annex (1943):** Located in the eastern portion of the lot, the one- to two-story, brick Former Annex was constructed in 1943.
  - **Garage (unknown):** Located in the eastern portion of the lot, the one-story, concrete Garage was constructed at some point between 1945 and 1957.
  - **Former High School and Addition (1957/2006):** Located in the western portion of the lot, the original two-story brick High School building was constructed in 1957. A two- to three-story Addition was added to the northern end of the High School in 2006.
  - **Former Pre-K Center (1960):** Located on the eastern portion of the project site, the one- to two-story, brick Former Pre-K Center was constructed in 1960. Outside the building is a former play area.
  - **Gymnasium (unknown):** The one-story, brick Gymnasium is located on the southeastern corner of the lot.
- Landscaped Areas
  - Notable landscaped areas are located throughout this lot and include maintained lawns with plantings beds, shrubbery, and mature trees, as well as a tree-covered area to the lot's northeastern corner.
- Driveways and Parking Areas
  - This lot is traversed by driveways that provide access to the former St. John Villa Campus buildings, as well as several parking areas.

Block 3089, Lot 59

Block 3089, Lot 59 is an approximately 0.99-acre (43,102-sf) rectangular lot located at the northeastern corner of Block 3089, bounded by Cleveland Place to the north and to the east, Chicago Avenue to the south, and Fingerboard Road and Columbia Avenue to the west. This portion of the project site has approximately 475 feet of frontage on Cleveland Place. The lot was used as a parking lot for the former St. John Villa Academy. The asphalt-paved parking lot consists of two distinctive sections. The southern half is at a higher grade than the northern half and is bordered by a stone fence topped with chain-link fencing along Cleveland Place. The northern half is at a lower elevation and is bordered by chain-link fencing along Cleveland Place.

**Proposed Actions**

Construction of the approximately ~~764~~<sup>736</sup>-seat PS/IS Gifted and Talented facility, a shared facility for two approximately 627-seat IS/HS with approximately 96 seats for a District 75 program, athletic field, internal driveway network, and parking area entails demolition of the existing Villa, Former Elementary School, Former Annex, Garage, Former High School and Addition, Former Pre-K Center, and the parking lot on Block 3089, Lot 59.<sup>3</sup> The Chapel Building located on the central portion of Block 3087, Lot 1 would be preserved as part of the proposed actions. Construction would be phased beginning in ~~Q4 fall~~ 2024 (see Table 1, “Construction Phasing Plan”). Demolition would begin in ~~Q4~~ September 2024 and conclude in ~~Q1~~ February 2025. Site work, grading, and utilities would begin in ~~Q1~~ February 2025 and conclude in ~~Q4~~ December 2025. Construction of the shared ~~IS/HS~~ IS/HS facility for two IS/HS and athletic field would begin in ~~Q3~~ September 2025 and be complete by ~~Q3~~ August 2029. Construction of the PS/IS facility and renovation of the Chapel Building would begin in ~~Q3~~ September 2025 and conclude in ~~Q3~~ September 2030. It is anticipated that the shared ~~IS/HS~~ IS/HS facility for two IS/HS would be operational in ~~Q3 fall~~ 2029 while construction activities related to the PS/IS facility and Chapel Building renovations are ongoing.

**Table 1: Construction Phasing Plan**

Phase	Start	End
Demolition	<del>September</del> <u>Q4</u> 2024	<del>February</del> <u>Q1</u> 2025
Site Work, Grading, and Utilities	<del>February</del> <u>Q1</u> 2025	<del>December</del> <u>Q4</u> 2025
Construction of Shared <del>IS/HS</del> <u>IS/HS</u> Facility <u>for two IS/HS</u> and Athletic Field*	<del>September</del> <u>Q3</u> 2025	<del>August</del> <u>Q3</u> 2029
Construction of <u>PS/IS</u> facility and Renovation of Chapel Building*	<del>September</del> <u>Q3</u> 2025	<del>September</del> <u>Q3</u> 2030
* <b>Note:</b> It is anticipated that the shared <del>IS/HS</del> <u>IS/HS</u> facility <u>for two IS/HS</u> would be operational in <del>fall</del> <u>Q3</u> 2029 while construction activities related to the <u>PS/IS</u> facility and Chapel Building renovations are ongoing.		

Source: SCA, 2024.

The PS/IS facility would be constructed as an approximately ~~96,381~~<sup>92,303</sup>-sf, standalone structure (see Table 2, “Project Elements”). It would provide approximately ~~764~~<sup>736</sup> seats, including approximately 96 District 75 seats, for students in grade levels pre-kindergarten through five, and would include classrooms for those grade levels, special education (District 75) classrooms, specialized instruction classrooms, science labs and resources rooms, a gymnasium with retractable seating, lobby, student services offices,

<sup>3</sup> Per the New York City Department of Finance Record, the SCA acquired Block 3089, Lot 59 and Block 3087, Lot 1 in 2019.

storage areas, administrative space, cafeteria space and kitchen, and custodial space. Entrances would be located on the southwestern frontage of the proposed structure facing Landis Avenue and the northeastern and southern frontages facing the interior of the project site. An approximately ~~16,000~~5,600-sf at-grade play yard would be provided on the southeastern side of the proposed PS/IS facility.

The new shared ~~IS/HS~~ facility for two IS/HS would be constructed as an approximately ~~186,405~~165,739-sf, three- to five-story structure. The main entrance would be located on the western frontage of the proposed structure, facing toward Landis Avenue, closest to the Garson Avenue driveway entrance/exit. ~~Secondary entrances would be located on the southern and eastern sides of the building.~~ The shared ~~IS/HS~~ facility for two IS/HS would provide approximately ~~1,350~~1,254 seats for students in grades six through twelve, and would include classrooms for those grade levels, special education (District 75) classrooms, a resource room for small group instruction, an art classroom, a music room and storeroom, a science lab and demo room, library, medical suite, cafeteria and kitchen, custodial areas, physical education space (a competition gymnasium with bleacher seating, a stage, storage areas, locker rooms, an exercise room, and a health instructor’s office), custodial areas, and storage

**Table 2: Project Elements\***

Project Element	Area (sf)	Total Seats	Non-D75 Students	D75 Students	Teachers and Staff**	Parking Spaces
PS/ <u>IS</u>	<u>96,381 sf</u> <del>92,303 sf</del>	<u>764</u> <del>736</del>	<u>668</u>	96	<u>99</u> <del>96</del>	--
<u>Shared Facility for two IS/HS</u>	<u>186,405 sf</u> <del>165,739 sf</del>	<u>1,350</u> <del>1,254</del>	<u>1,254</u>	96	<u>158</u> <del>148</del>	--
Athletic Field (including bleachers)	84,000 sf	--	==	--	--	--
Renovated Chapel Building	21,700 sf	--	==	--	--	--
Maintenance Building	<u>3,275 sf</u> <del>2,200 sf</del>	--	==	--	--	--
Staff Parking Lot on (including landscaping)	41,996 sf	--	==	--	--	98
Internal Driveway Network on (including landscaping)	175,668	--	==	--	--	67

\*Note: All project numbers are approximate.

\*\*Note: Based on a ratio of 10:1 (10 students to one teacher) for non-District 75 seats and a ratio of 6:1:1 (six students to one special education teacher and one aid) for District 75 seats.

Source: SCA, 2024; STV Incorporated, 2024.

An approximately 84,000-sf athletic field would be constructed at the southeastern portion of the project site. The athletic field would host athletic programs, including but not limited to soccer, football, field hockey, and lacrosse. Bleacher seating, which could accommodate approximately 700 viewers, would occupy approximately 4,000 sf on the western side of the athletic field. Outdoor lighting would be provided along the edges of the athletic field.

A staff parking lot with approximately 98 parking spaces would be constructed on Block 3089, Lot 59 across Cleveland Place from the rest of the academic campus. In addition to this lot, approximately 67 parking spaces would be provided on Block 3087, Lot 1 within an internal driveway network that would provide

interior access to the site. Existing driveway connections to Garson Avenue, Cleveland Place, Landis Avenue, and Hastings Street would be maintained and a new connection to Narrows Road South would be added as part of the proposed project. A small maintenance structure would be constructed on the southern edge of Block 3087, Lot 1 near Hastings Street. Landscape features would be introduced throughout the campus.

The proposed PS/IS would employ approximately 99 ~~96~~ teachers and staff. The proposed shared ~~IS/HS~~ facility for two IS/HS would employ approximately 158 ~~148~~ teachers and staff. These public school facilities would operate during normal school hours, from September to June, though it is expected that the athletic field would operate occasionally in the evenings, on weekends, and during summer months when school is not in session.

### **C. PROPOSED SCOPE OF WORK FOR THE TARGETED EIS**

The Targeted EIS will contain:

- A description of the proposed project and its environmental setting;
- A statement of the environmental impacts of the proposed project, including its short- and long-term effects, and typical associated environmental effects;
- An identification of any significant adverse environmental effects that cannot be avoided if the proposed project is completed;
- A discussion of alternatives to the proposed project;
- An identification of any irreversible and irretrievable commitments of resources that would be involved if the proposed project is built; and
- A description of mitigation measures proposed to avoid or minimize any significant adverse environmental impacts.

Except where otherwise noted in methodologies of respective technical analyses, as described herein, most Targeted EIS analyses for the proposed project will be performed for the 2030 build year, when the proposed project is expected to be completed and fully operational. For this build year, the Targeted EIS will assess the potential for the proposed project to result in any significant adverse impacts by comparing conditions anticipated with the proposed project fully constructed and operational (“With-Action conditions”) to conditions expected without the proposed project (“No-Action conditions”). The Targeted EIS will assume that the physical condition of the project site in the future without the proposed project would resemble existing conditions with the existing campus buildings remaining on-site and vacant. In addition, the Targeted EIS also will account for other “background projects” and/or changes expected to occur independent of the proposed project but in the vicinity of the project site, as appropriate.

Consistent with SCA practices, because the proposed project would be developed in New York City, this Targeted EIS will be prepared generally following the guidelines of the *New York City Environmental Quality*

*Review (CEQR) Technical Manual.*<sup>4</sup> In this way, the proposed project may be assessed in a manner that appropriately reflects the urban conditions and setting of the project site.

## *Scope of Work for Detailed Analyses*

### **TASK 1: PROJECT DESCRIPTION**

The first chapter of the Targeted EIS will introduce the reader to the proposed project and present the analytical framework used to assess potential impacts. The chapter will contain project identification; the background and history of the proposed project and project site; a statement of purpose and need for the proposed project; a detailed description of the proposed actions necessary to achieve the proposed project; a description of the development program, project siting, and design; and a discussion of approvals required, procedures to be followed, and the role of the Targeted EIS in the process. This chapter is the key to understanding the proposed project and its impacts and gives the public and decision-makers a base from which to evaluate the proposed project against the future without the proposed project.

### **TASK 2: SHADOWS**

A shadows analysis assesses whether new structures resulting from an action would cast shadows on sunlight-sensitive resources of concern, such as publicly accessible open space, sunlight-sensitive architectural resources, natural resources, or Greenstreets, and the significance of their impact. This chapter will examine the potential for the proposed actions to result in significant adverse shadow impacts pursuant to *CEQR Technical Manual* criteria and with reference to the analyses presented in other technical areas.

Generally, the potential for shadow impacts exists if an action would result in new structures or additions to buildings resulting in structures of over 50 feet in height that could cast shadows on sunlight-sensitive resources, as defined by the *CEQR Technical Manual*. New construction or building additions resulting in incremental height changes of less than 50 feet could also potentially result in shadow impacts if they are located adjacent to, or across the street from, a sunlight-sensitive resource of concern.

The proposed actions would permit development of buildings greater than 50 feet in height on the former St. John Villa Campus, which is eligible for inclusion on the State/National Register of Historic Places (S/NRHP). While the proposed actions would entail the demolition of several buildings on the campus and the regrading of the site's landscaping, the Chapel Building would be preserved. The S/NRHP-eligible Chapel Building contains design elements that contrast light and dark design elements (e.g., deep window reveals) as well as architectural ornamentation that may be considered sunlight-sensitive per the *CEQR*

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<sup>4</sup> The Targeted EIS will use the most recent version of the New York City Mayor's Office of Environmental Coordination *CEQR Technical Manual*, last updated December 2021. The *CEQR Technical Manual* can be accessed here: [https://www1.nyc.gov/assets/oec/technical-manual/2021\\_ceqr\\_technical\\_manual.pdf](https://www1.nyc.gov/assets/oec/technical-manual/2021_ceqr_technical_manual.pdf).

*Technical Manual*. As such, a preliminary screening will be prepared and, if determined necessary, a detailed analysis. The steps from a preliminary assessment to a detailed analysis are as follows:

- A preliminary shadows screening assessment ascertains whether the shadows from the proposed project may reach any sunlight-sensitive resources of concern at any time of year, as described following:
  - A Tier 1 Screening Assessment ascertains whether the shadows cast by projected and potential development would reach any sunlight-sensitive resources of concern at any time of year. The longest shadow study area will be calculated by multiplying a factor of 4.3 times a structure's maximum feasible height, including all rooftop mechanical equipment, parapets, and any other parts of the building; this calculation is used to determine the longest shadow that could be created by this building in New York City on the winter solstice, December 21. This longest shadow is then used to define a reasonably conservative study area the Tier 2 Screening Assessment.
  - A Tier 2 Screening Assessment ascertains if any part of an identified sunlight-sensitive resource of concern lies within the longest shadow study area. The Tier 2 assessment determines the triangular area that cannot be shaded by the proposed project due to the path of the sun across the sky, which in New York City is the area that lies south of a structure, between -108 and +108 degrees from true north.
  - If any portion of a sunlight-sensitive resource of concern is within the area that could be potentially shaded by the proposed project, a Tier 3 Screening Assessment will be conducted. The Tier 3 Screening Assessment determines if shadows resulting from the proposed project can reach a sunlight-sensitive resource of concern using three-dimensional computer modeling software with the capacity to accurately calculate shadow patterns taking into consideration not only building heights but topography as well.
- If the screening analysis does not rule out the possibility that action-generated shadows would reach any sunlight-sensitive resources of concern, a detailed analysis of potential shadow impacts will be provided in the Targeted EIS. The detailed shadow analysis establishes a baseline condition based on the No-Action conditions, which is compared to the With-Action conditions to illustrate the shadows cast by existing or future buildings and distinguish the additional (incremental) shadow resulting from the proposed project. A detailed analysis includes graphics illustrating these conditions, a summary table summarizes the entry and exit times of incremental shadows on sunlight-sensitive resources, and an assessment of the significance of shadow impacts on the relevant sunlight-sensitive resource(s).

### **TASK 3: HISTORIC AND CULTURAL RESOURCES**

The *CEQR Technical Manual* identifies historic resources as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archeological importance. This includes designated NYC Landmarks; properties calendared for consideration as landmarks by the New York City Landmarks Preservation Commission (NYCLPC); properties listed on or determined eligible for the S/NRHP or contained within a district listed on or determined eligible for S/NRHP listing; properties recommended by the New York State

Office of Parks, Recreation and Historic Preservation (OPRHP) for listing on the S/NRHP; and National Historic Landmarks.

Based on the guidance of the *CEQR Technical Manual*, a Historic and Cultural Resources chapter will be prepared that will assess the proposed project's potential effects on architectural and archaeological resources.

### **Historic/Architectural Resources**

The project site comprises the S/NRHP-eligible former St. John Villa Campus. The campus contains eight buildings: the Villa, Chapel Building, Former Elementary School, Former Pre-K Center, Former Annex, Garage, Former High School and Addition, and Gymnasium. All of these buildings but for the Gymnasium are contributing elements to the overall St. John Villa Campus. The proposed project would require the demolition of all buildings except for the Chapel Building and extensive grading would likely be necessary to accommodate the proposed school facilities. The SCA has initiated consultation with OPRHP. An assessment of architectural resources will be provided in the Targeted EIS informed by the SCA's consultation with OPRHP.

### **Archaeological Resources**

Due to the historic nature of the St. John Villa Campus, the Targeted EIS will include an archaeological impact assessment. This assessment will include documentary research and, if necessary, recommendations as to testing will be included in the Targeted EIS. This comprehensive documentary report is often referred to as a Phase 1A report; the subsequent testing, if indicated, is referred to as a Phase 1B.

A Phase 1A technical report will be prepared based on the documentary research. Any portions of the property with potential resources that may be disturbed or destroyed by the proposed project will be identified. If necessary, recommendations will be made for testing and mitigation.

## **TASK 4: WATER AND SEWER INFRASTRUCTURE – SEWERS AND STORMWATER ASSESSMENT**

The project site is located in an area with a combined sewer system and is on the border between two service areas, Oakwood Beach Wastewater Resource Recovery Facility (WRRF) and Port Richmond WRRF. Which WRRF the proposed project will connect to will be determined in consultation with the New York State Department of Environmental Conservation (NYSDEC). The proposed project would introduce a net increase of more than 150,000 sf of community facility compared to No-Action conditions, which is the threshold found in the *CEQR Technical Manual*; thus, a preliminary wastewater/stormwater analysis will be required.

The preliminary analysis of sewers focuses on the effects of increased sanitary and stormwater flows on the City's infrastructure serving the site. Therefore, the study area for the proposed project will include either the Oakwood Beach or Port Richmond WRRF and the conveyance system comprising the plant's drainage basin and affected sewer system. The study area will be defined in accordance with the *CEQR Technical Manual*, and the following steps will be completed per CEQR methodologies:

- **Existing conditions.** Describe the existing wastewater and stormwater conveyance systems and the Oakwood Beach or Port Richmond WRRF and determine the existing sanitary flows or treated wastewater flows resulting from the area of the proposed project.
- **No-Action and With-Action conditions.** Future No-Action conditions estimates of the expected sanitary flows or treated wastewater flows will be determined based on *CEQR Technical Manual* guidance; should other topical areas (e.g., Land Use, Zoning, and Public Policy) reveal No-Action projects, they may be included in the future No-Action conditions for the assessment of sewers, if appropriate. The volume and peak discharge rates of stormwater and sewage expected from the site with the proposed project will be determined for a range of rainfall events. The New York City Department of Environmental Protection (NYCDEP) matrix in Worksheet 2 in the *CEQR Technical Manual* will be used for this purpose. If the matrix analysis indicates an increase of 2 percent or more over existing conditions for dry and wet weather flows from the project site for any rainfall event that would discharge to the Jamaica Bay watershed, then, per the *CEQR Technical Manual* procedure, the matrix should be reviewed by NYCDEP for guidance as to whether further modeling is necessary. Conditions on the project site with and without the proposed project will be described in the Targeted EIS and presented in a tabular format, per the guidance of the *CEQR Technical Manual*, and summarily described in the Targeted EIS.

## **TASK 5: TRANSPORTATION**

The transportation analyses conducted for the proposed actions will include traffic, transit, and pedestrian analyses to determine the potential impacts associated with the proposed actions. In addition, vehicular crash analyses will also be presented and the parking demand generated by the proposed actions will also be considered in a parking analysis.

### **Traffic Analysis**

According to the *CEQR Technical Manual*, significant adverse impacts would be unlikely (and a detailed traffic assessment typically not warranted) with a project that would generate fewer than 50 new vehicle trips in any peak hour. However, the proposed project would be expected to exceed the 50-trip *CEQR Technical Manual* analysis threshold, compared to No-Action conditions. Therefore, detailed traffic analyses are proposed. These traffic analysis tasks will be undertaken as described following:

- **Existing conditions.** To develop the understanding of existing conditions, data collection will be undertaken as follows:
  - Conduct traffic counts at traffic analysis locations via a mix of automatic traffic recorder (ATR) machine counts and intersection turning movement counts (TMC). ATRs will provide continuous 24-hour traffic volumes for nine days (five weekdays and two weekends), summarized in 15-minute intervals, and used to identify the temporal distribution of traffic along the principal corridors serving the project site.

- Collection of video turning movement and vehicle classification count data will be conducted during the weekday school arrival 6-9 AM and dismissal 2-4 PM peak periods at study intersections and for the Saturday afternoon period between 12-5 PM. The weekday traffic data will be used for the school operation and construction peak hour analysis and the Saturday traffic data will be used to analyze a potential sports event on the athletic field. The data will be collected simultaneous with the ATR counts, on one weekday (either Tuesday, Wednesday, or Thursday) when school is in session and one Saturday. Where applicable, available information from recent studies in the vicinity of the study area will be compiled.
- Inventory physical and operational data as needed for capacity analysis purposes at each of the analyzed locations. The data collected will be consistent with current *CEQR Technical Manual guidelines* and will include such information as street widths, number of traffic lanes and lane widths, pavement markings, turn prohibitions, parking regulations, and signal phasing and timing data. Official signal timings will be obtained from the New York City Department of Transportation (NYCDOT).
- Perform observations of traffic conditions including vehicular delays and queues in the study area during the morning and afternoon peak periods.
- Development of existing traffic volumes in the study area during the weekday morning and afternoon peak hours and Saturday midday peak hour.
- Using 2000 Highway Capacity Manual (HCM2000) methodologies, determine existing traffic conditions at study locations including capacities, volume-to-capacity (v/c) ratios, average control delays per vehicle and levels of service (LOS) for each lane group and intersection approach, and for the intersection overall.
- **No-Action conditions.** For the proposed project, planned projects that would be developed in the area in the No-Action conditions will be identified, and the associated future No-Action conditions travel demand generated by these projects will be determined. The future traffic volumes from No-Action projects will be estimated using published environmental assessments or forecasted based on current *CEQR Technical Manual* guidelines, U.S. Census data, and/or data from other secondary sources. An annual growth rate will be applied to existing traffic volumes to account for general background growth, per *CEQR Technical Manual* guidelines. Mitigation measures planned for No-Action projects will also be reflected in the future No-Action traffic network as will any relevant initiatives planned by NYCDOT and other agencies. No-Action traffic volumes will be determined, v/c ratios, and levels of service will be calculated, and congested intersections will be identified.
- **With-Action conditions.** Future traffic volumes during the weekday morning and afternoon peak hours and Saturday midday peak hour as a result of the proposed project would be developed for the future school opening year. Any physical changes to the roadway network

due to the proposed project will be reflected in the Build volumes. Site-generated peak hour volumes will be superimposed onto corresponding No Build volumes.

Analysis of the three peak hour traffic conditions will be conducted using the HCM2000 methodologies and Synchro 11 software. The resulting v/c ratios, delays and LOS for the future With-Action conditions will be determined and significant traffic impacts will be identified in accordance with current *CEQR Technical Manual* criteria.

For those intersections identified to experience a significant traffic impact, potential traffic mitigation measures will be evaluated, as appropriate, in consultation with NYCDOT. Potential traffic mitigation could include both operational and physical measures such as changes to roadway approach pavement markings, curbside parking regulations, traffic signal timing and phasing, roadway widening, and new traffic signal installations.

### **Bus Analysis**

As the proposed project potentially would add 50 or more trips per direction through the peak load point on one or more bus routes, a bus analysis is warranted and will be undertaken according to the following steps:

- **Existing conditions.** A detailed bus-line haul analysis will be performed for the AM and PM peak hours for all bus routes that exceed *CEQR Technical Manual* thresholds for analysis. Existing peak hour bus service levels and maximum load-point ridership will be documented. The study will likely focus on the S51, S52, S53, S78, S79, and S93 routes that serve the project site. A Saturday midday transit analysis is not anticipated to be necessary.
- **No-Action and With-Action conditions.** Future No-Action and With-Action conditions will be determined, in a manner similar to that described above for existing conditions analyses. The effects of new project-generated peak hour trips will be determined, and bus transit mitigation, if warranted, will be identified in consultation with NYCT.

### **Pedestrian Analysis**

Project-generated pedestrian demand may be significant given the proposed student enrollment, which would be expected to generate substantial numbers of walk trips in the immediate area to connect to residential areas and bus stops. This task will be undertaken in accordance with the following steps:

- **Existing conditions.** Pedestrian locations that serve the local buses in the area will be examined, including sidewalks and crosswalks in the immediate vicinity of the project site. A quantitative analysis of pedestrian conditions will be prepared focusing on sidewalks, corner areas and crosswalks in the vicinity of the project site expected to be used by 200 or more project-generated pedestrian trips during one or more peak hours. Pedestrian analyses will be performed for the weekday AM (school arrival) and PM (school dismissal) peak hours. A Saturday midday pedestrian analysis is not anticipated to be necessary.
- **No-Action and With-Action conditions.** The analysis will evaluate No-Action and With-Action conditions during the weekday AM and PM peak hours, and the potential for incremental

demand from the proposed project to result in significant adverse impacts based on current *CEQR Technical Manual* criteria. Potential measures to mitigate any significant adverse pedestrian impacts will be identified and evaluated.

### **Crash Analysis**

An examination of vehicular crash analyses will be conducted. Crash data for study area intersections from the most recent three-year period will be obtained from NYCDOT. These data will be analyzed to determine if any of the studied locations may be classified (according to *CEQR Technical Manual* criteria and/or the latest NYCDOT methodology) as “high” vehicle crash or high pedestrian/bike crash locations and whether trips and changes resulting from the proposed project would adversely affect vehicular and pedestrian safety in the area. If any high-crash locations are identified, feasible improvement measures will be explored to alleviate potential safety issues. As appropriate, improvements expected to alleviate identified potential vehicular and pedestrian safety issues will be described in the Transportation chapter of the Targeted EIS.

### **Parking Analysis**

Parking demand attributable to the proposed school will be analyzed. To begin, on-site parking will be evaluated to determine whether project-generated demand will be accommodated. A detailed parking assessment will be conducted. The detailed parking assessment will comport with guidance provided in the *CEQR Technical Manual* and consist of the following steps:

- **Existing conditions.** An inventory will be made of the supply and utilization of all off- and on-street parking locations within ¼-mile (a typical ‘walkable’ radius) of the project site. Parking data will be collected during the weekday morning and midday periods when school is in session. Parking data will also be collected during the Saturday afternoon period to analyze a potential sports event on the athletic field. An estimate will be made of project-related parking demand and a quantitative analysis of the parking area will be conducted to determine the impact of the proposed campus on peak-hour parking conditions in the area.
- **No-Action conditions.** Future parking availability in the ¼-mile study area will be projected, based on anticipated background growth rates and forecasts of demand from the proposed No Build projects.

**With-Action conditions.** The future conditions with the proposed actions will be evaluated based on consideration of two factors: the proposed on-site parking supply attributable to the proposed project, and the potential capacity off-site that would be expected to be available to accommodate any overflow parking demand from the proposed project, thus adding to the overall new on-street parking demand. Any potential parking shortfall within the study area will be identified. If the parking analysis determines that on-site parking supply would meet future parking demands, then an analysis of the off-site parking supply would not be warranted or conducted for the Targeted EIS.

## **TASK 6: AIR QUALITY**

Air quality analyses will be carried out in accordance with the *CEQR Technical Manual*, as well as other relevant guidance and protocols provided by NYSDEC, NYCDEP, and the U.S. Environmental Protection Agency (USEPA). The proposed air quality analyses will evaluate both stationary source impacts and mobile source impacts.

### **Mobile Source Analysis**

Based on a preliminary review of the study area roadway configuration and traffic patterns for the No-Action and With-Action conditions, it is anticipated that projected vehicle trips generated by the proposed actions may exceed the CO threshold of 170 vehicles in a peak hour at a number of intersections in the study area. The intersection that is predicted to have the highest increment will be selected for CO mobile source detail analysis.

For PM<sub>2.5</sub>, the screening procedure outlined in the *CEQR Technical Manual* is based on determining whether the projected number of vehicle trips at an intersection exceeds thresholds based on heavy-duty diesel vehicle (HDDV) equivalents. The thresholds are as follows:

- 12 or more HDDV for paved roads with average daily traffic fewer than 5,000 vehicles;
- 19 or more HDDV for collector roads;
- 23 or more HDDV for principal and minor arterials; or
- 23 or more HDDV for expressways and limited access roads.

To determine whether any of these thresholds are exceeded, the worksheet referenced in Section 201 of the *CEQR Technical Manual* will be used to calculate the equivalent number of HDDV equivalents at intersections in the traffic study area. The worksheet uses vehicle classification information based on the traffic data collected for the project and assigns these classifications to vehicle categories using a table referenced in the *CEQR Technical Manual*. Roadway classifications will be determined by corridor at each intersection, based on NYCDOT functional class criteria and With-Action traffic volumes.

The intersection that is predicted to have the highest increment will be selected for a detailed mobile source analysis of PM (PM<sub>2.5</sub> and PM<sub>10</sub>).

A detailed parking lot analysis will be conducted in accordance with the guidance of the *CEQR Technical Manual* for CO, PM<sub>2.5</sub>, and PM<sub>10</sub>.

### **Stationary Source Analysis**

For stationary sources, there are three considerations: the potential impact of existing pollutant emissions sources on the proposed project, the potential effect ~~that~~ of emissions from the proposed project on existing sensitive uses, and the potential effect ~~that~~ of emissions from the proposed buildings on the proposed buildings. Therefore, an analysis of stationary sources will be performed, starting with identification of existing stationary major sources of air pollution in the project vicinity. Stationary source emissions in the With-Action conditions will be evaluated. The emissions from the proposed school buildings will be evaluated based on the stationary source *CEQR Technical Manual* screening procedure,

considering fuel type, usage, facility type, and proposed stack location. The impacts from the proposed school buildings to the proposed buildings will be evaluated based on procedures of *CEQR Technical Manual*. Should a screening (nearby residential and institutional buildings) fail to eliminate the proposed school buildings as a significant contributor of pollution, a detailed analysis will be conducted as a contingency.

Pollutant emissions from existing industrial sources in the vicinity would also be examined. Should field investigations identify industrial emission sources nearby the proposed site, an air toxics screening assessment will be conducted. Pending the results of this assessment, a more detailed industrial source assessment may be required.

Potential project-related impacts on air quality for the future analysis year for both mobile and stationary sources will be reviewed in accordance with the air quality compliance programs in the State Implementation Plan (SIP). Study results will be summarized in a statement, which indicates whether the proposed project is consistent with the policies in the SIP. Any mitigation measures necessary to result in project compliance with the SIP will be highlighted in the study results.

## **TASK 7: NOISE AND VIBRATION**

The operation of an educational facility of this size could potentially result in both mobile and stationary source noise impacts. The principal sources of noise resulting from the operation of the proposed new school buildings would be from the school's playground and gymnasium areas, the school's mechanical/ventilation systems, and project-induced mobile sources. The noise impact assessment of the proposed actions will be completed in conformance with the *CEQR Technical Manual* and SCA noise impact criteria. Mobile source traffic noise will be assessed for potential traffic noise exposure and impact at the nearest noise sensitive properties to the proposed school bus routes as part of the Targeted EIS. A description of the various elements of noise assessment ~~are~~ is described below.

### **Existing Noise Levels**

Existing ambient noise levels will be measured at representative noise sensitive properties nearest the project site during time periods when schools are typically operational. Of particular concern will be new traffic trip generation by students and staff vehicles, and school buses that would be introduced into the community and construction noise activities. The measured noise levels will account for all ambient noise sources in the general area, such as vehicle traffic movements on local roadways. The proposed project also includes an athletic field, outdoor ground floor play area, and an indoor gymnasium. As appropriate, the noise assessment will establish the appropriate window-wall attenuation requirements for the new school buildings and the surrounding residential buildings facing the project site necessary to maintain interior noise levels within acceptable noise-exposure limits.

### **Playground Noise Analysis**

Prediction of future school playground noise levels will be estimated at the nearest sensitive receptors. The results of the 1992 SCA playground noise assessment will be used to determine the potential noise

exposure and impact associated with the potential greater utilization of the outdoor playground. The SCA 5 dBA minimum increase will be the basis for determining potential noise impacts to nearby sensitive properties. If needed, any recommended abatement measures will be defined based on CEQR window-wall attenuation requirements.

### **Mobile Source Analysis**

The effect of traffic noise generated from the additional traffic trips to and from the proposed school buildings, including those generated from the school bus service, will be determined via the CEQR Passenger Car Equivalent (PCE) noise screening methodology. Future noise levels for No-Action and With-Action conditions will be determined.

### **Stationary Source Noise Analysis**

Potential stationary source noise impacts related to the proposed project's mechanical and ventilation systems and existing sources will be addressed qualitatively. Existing noise exposure on the proposed project will be addressed using the CEQR Noise Exposure Guidelines. Consideration will be given to the noise exposure standards designated in the New York City Noise Code and CEQR Noise Standards.

### **Proposed School Window-Wall Attenuation Requirements**

The total combined effects of existing and future noise exposure generated from each of the proposed outdoor active recreational areas will be determined to ensure interior noise levels inside the proposed school buildings do not exceed the CEQR 45 dBA maximum L<sub>10</sub> interior limit. In addition, if necessary, replacement windows which provide greater attenuation than the standard 25 dBA, will be specified at all nearby sensitive properties that are found to exceed CEQR interior noise exposure level limits.

### **Noise Assessment Findings Documentation**

The results of the noise analysis study will be documented in the Targeted EIS. The noise assessment documentation will include a table presenting the existing measured peak hour noise levels, an estimate of the future traffic noise levels derived from PCE estimates without and with the proposed project, and an estimate of noise exposure from playground activities at the nearest noise-sensitive receptors. Recommendations for appropriate window-wall attenuation requirements for all facades of the proposed school buildings will be provided.

## **TASK 8: PUBLIC HEALTH**

As described in the *CEQR Technical Manual*, a public health analysis is not necessary for most projects; it may be necessary for projects where a significant unmitigated adverse impact is found in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise. It is likely that any such impacts that may be determined with the proposed project would be avoided, minimized, or mitigated and, thus, it is not expected that there will be a need for further consideration in a Public Health effects assessment. However, this determination will be made and disclosed in the Targeted EIS following the completion of all project analyses.

## **TASK 9: NEIGHBORHOOD CHARACTER**

The character of a neighborhood is established by numerous factors, including land use patterns, the scale of its development, the design of its buildings, the presence of notable landmarks, and a variety of other features. A preliminary assessment of neighborhood character will be provided in the Targeted EIS to determine whether changes expected in other technical analysis areas — land use, zoning, and public policy; socioeconomic conditions; community facilities; open space; historic and cultural resources; urban design and visual resources; shadows; transportation; and noise — may affect a defining feature of neighborhood character. Given that the SCA will work throughout Targeted EIS analyses to avoid significant unmitigated impacts, developing mitigation to minimize or avoid any significant adverse impacts in all technical areas, it is not anticipated that potential effects of the proposed project would affect defining features of the surrounding neighborhood. The preliminary assessment will be summarized in the Targeted EIS.

## **TASK 10: CONSTRUCTION IMPACTS**

The *CEQR Technical Manual* provides guidance on when it is appropriate to include a detailed assessment of construction impacts. According to the *CEQR Technical Manual*, construction duration is often broken down into short-term (less than two years) and long-term (two or more years). The Targeted EIS will include a review of potential construction period effects attributable to project construction. In particular, the Construction Impacts chapter of the Targeted EIS will assess potential construction-related impacts to transportation, air quality, and noise and vibration. This chapter will also provide the singular description of construction activities such as phasing, staging plans, equipment that would be used, and schedule.

### **Transportation**

As described previously in the project understanding, a construction-phase traffic analysis will be performed to assess the potential impact of construction worker and truck trips on the study area roadway network. The number of estimated workers and truck trips will be determined and assigned to the roadway network to determine the study intersections that would require a detailed analysis during the peak period of construction in accordance with the *CEQR Technical Manual* guidelines. A construction-phase parking analysis will also be performed to assess the potential impact of construction worker parking on the study area.

### **Air Quality**

A quantitative assessment of air quality-related construction phase impacts will be undertaken. The assessment of construction period air quality impacts is concerned with pollutants introduced on-site and off-site by project construction activities. This analysis will be undertaken for the worst-case study short-term and long-term time periods, which would be anticipated to represent the most construction-related activities associated with the proposed project. To determine the worst-case construction time periods for evaluation, estimated month and annual emissions of PM<sub>2.5</sub> will be calculated for critical time periods of construction identified for assessment. The detailed assessment will determine whether the projected construction operations would cause or exacerbate violations of applicable national ambient air quality

standards (NAAQS) or CEQ *de minimis* criteria for 1-hour and 8-hour CO, 24-hour and annual PM<sub>2.5</sub>, 24-hour PM<sub>10</sub>, and annual NO<sub>2</sub>.

The following data elements will be used in the analysis of construction-period air quality:

- Types of equipment, fuel used, and operations anticipated at the construction site, and duration and phasing of construction activities;
- Numbers of vehicles (trucks and automobiles) entering and leaving the construction site daily and during peak periods, and the effects of these vehicles on the traffic conditions of heavily traveled roadways and congested intersections; and
- Locations of nearby sensitive existing and future land uses.

### ***On-Site Construction Activity Impacts***

The analysis of the potential impacts from on-site activities at the construction site will include estimation of emissions generated by construction equipment and dust-generating activities. Quantification of construction-related impacts will be based on the month and year of analysis identified above, utilizing: peak month, peak year of construction activity for the proposed project. The analysis will follow the steps below:

- Evaluation of construction areas and nearby sensitive land uses, construction schedules, levels and duration of construction activities, and a determination of the areas with the greatest potential for construction-phase air quality impacts;
- Estimation of emissions generated by construction activities (demolition, excavation, construction) at the construction site during the years of peak construction activity, including emissions from fugitive dust and exhaust from diesel-powered equipment and trucks, as well as emissions from temporary boilers operating during the construction phase;
- Estimation of hourly, daily, and annual emissions for CO, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> for the various stages and types of construction activities associated with the proposed project; and
- Dispersion modeling, using USEPA's AERMOD dispersion model, of construction-phase emissions of each construction area for the highest period for each pollutant.

### ***Off-Site (Mobile Source) Construction Activity Impacts***

The additional truck and automobile (worker) trips generated by the construction activities could affect traffic conditions along heavily traveled roadways and congested intersections. The potential air quality impacts of these trips will be estimated as follows:

- Guidelines developed in the *CEQR Technical Manual* will be used to select intersection locations subject to a preliminary screening-level analysis. This analysis will estimate the potential to significantly impact CO, PM<sub>10</sub>, and PM<sub>2.5</sub> levels near these sites. Screening will be conducted per the mobile source procedures outlined in the operational analysis.

- Pollutant concentrations will be screened at each analysis site, if any are identified, for future No-Action and With-Action (construction) conditions for one future-year analysis and peak time period of most intense construction activity.

### ***Cumulative On-Site Plus Off-Site Impacts***

The cumulative (on-site and off-site) modeling results of the proposed project construction impacts will be compared to the NAAQS and/or CEQR *de minimis* criteria for each applicable pollutant. Additionally, a “project-on-project” analysis of stationary source emissions will be required within the project site because the proposed project will comprise multiple buildings, with some being built and occupied before others depending on the worst identified time periods to be analyzed.

### **Noise and Vibration**

Based on the year and time period of most intense construction activity, the analyses will be undertaken as follows:

#### ***Mobile Noise Sources***

Potential off-site construction-related traffic activity on roads exterior to the project site (in particular, construction-related vehicles, including worker trips and material handling trips on adjacent roadways), could result in a temporary increase in noise and vibration levels at sensitive locations on- and off-site that currently experience lower peak-hour traffic volumes. As a result, Targeted EIS will include a detailed traffic noise assessment to evaluate potential construction period impacts for the study year analyzed.

#### ***Construction-Site Noise Assessment***

Noise from the construction site would result from machinery, equipment vehicles, and associated activities. This noise could affect existing sensitive receptor locations near the project site as well as spaces that may be occupied on the project site during project construction. The Federal Highway Administration’s (FHWA) Roadway Construction Noise Model (RCNM), or an appropriate noise software, will be used to determine noise equipment source levels and to assess the potential for noise impacts at sensitive receptors nearby. Modeled results will be compared to existing noise levels and the relevant construction noise criteria based on the *CEQR Technical Manual* guidance. The extent and duration of potential noise impacts at each potentially affected noise receptor location during the phase of construction with the highest intensity of construction activities will be considered.

#### ***Construction-Site Vibration Assessment***

Potential impacts from construction-related vibration will be assessed with respect to both human annoyance and building damage. Construction schedule, phasing, activity, and equipment data will be developed for the noise and vibration assessments, including particular activities such as impact pile driving and blasting, which represent the two worst vibration-causing activities.

## **TASK 11: MITIGATION**

If significant impacts are identified in the analyses discussed above, practicable measures will be identified and assessed to mitigate those impacts. This chapter will summarize those findings. Where impacts cannot

be practicably mitigated, they will be identified in the Targeted EIS as significant unavoidable adverse impacts.

## **TASK 12: ALTERNATIVES**

The purpose of an alternatives analysis is to examine reasonable and practicable options that avoid or reduce project-related significant adverse impacts while achieving the goals and objectives of the proposed project. As stated in the *CEQR Technical Manual*, “CEQR requires that alternatives to the proposed project be identified and evaluated in an EIS so that the decision-maker may consider whether alternatives exist that would minimize or avoid adverse environmental effects.”

A No-Action Alternative will be considered. The No-Action Alternative would resemble existing conditions, with the project site remaining unused with several vacant structures, and no new development on the project site. If significant adverse impacts are identified that could not be mitigated, the Targeted EIS may evaluate an additional alternative project design and/or program expected to avoid unmitigated impacts.

## **TASK 13: SUMMARY CHAPTERS**

The Targeted EIS will include the following summary chapters:

### ***Executive Summary***

This chapter will include the key information that has been ascertained through this SEQRA environmental review process and that is disclosed within the body of this Targeted EIS and its accompanying appendices. The information comprising the executive summary will include findings of analyses, identification of impacts, and proposed mitigation measures.

### ***Cumulative Effects***

As noted in the task descriptions provided in this scope of work for other topical areas, such as transportation, air quality, noise, and construction impacts, analyses will be considered in combination to represent the entirety of the proposed actions. The potential for combined effects associated with the proposed actions and any past, present, and reasonably foreseeable future actions that may affect the same environs as the proposed project will be considered for those technical areas wherein potential effects are expected with the proposed actions, specifically including: transportation and noise. In addition, potential construction-period effects expected with the proposed actions are also considered in the context of construction associated with other actions in the vicinity. This information will be summarized in the Cumulative Effects chapter.

### ***Unavoidable Significant Adverse Impacts***

This chapter will identify significant adverse impacts for which no practicable mitigation has been identified, or the mitigation of which requires actions of other agencies that cannot be guaranteed.

***Growth-Inducing Aspects of the Proposed Project***

This chapter will assess the proposed project's potential to induce new development within the surrounding area.

***Irreversible and Irretrievable Commitments of Resources***

This chapter will summarize the development associated with the proposed project and resources such as construction materials and energy that would be irretrievably committed should the proposed project be built.