1.0 Executive Summary

1.1 PROJECT DESCRIPTION

On behalf of the New York City Department of Education (DOE), the New York School Construction Authority (SCA) proposes to construct a new school facility to replace PS 133 (the William A. Butler School) and expand capacity at the site in the northern Park Slope section of Brooklyn Community School District (CSD) 13. The project site is located at 375 Butler Street (Block 940, Lots 1, 16, and 65) on the western half of the block bounded by Butler Street to the south, Fourth Avenue to the west, Baltic Street to the north, and Gregory Place to the east. The site currently contains the existing PS 133 school building and an L-shaped schoolyard consisting of outdoor recreation areas and a community garden. The existing school contains approximately 39,000 square feet (SF) of floor area and currently serves approximately 264 Pre-Kindergarten (Pre-K) through Fifth-grade students in CSD 13.

The proposed project is intended to provide additional public school capacity on the site to meet the needs of the area's current and projected future elementary school students. The new facility will provide approximately 960 seats for Pre-K through Fifth grade students in two school organizations serving CSD 13 and CSD 15. The new facility would include an expanded elementary school program to accommodate approximately 300 students in the CSD 13 school organization and another 660 seats serving the CSD 15 school organization. The proposed school facility may also include a separate District 75 Special Education program, which would account for a percentage of the facility's 960 seats (currently assumed to be 84 seats). The proposed project would provide more space and upgraded facilities to accommodate the two school organizations' educational programs. In total, the proposed new school facility would result in a net incremental increase of approximately 696 seats over the enrollment of the existing PS 133.

Based on the preliminary schematic design, the proposed school building would be 5 stories tall with a cellar level (approximately 70–75 feet tall) and contain approximately 121,240 SF of space. The building would be configured in an L-shape, covering approximately 26,000 SF of the site that is currently occupied by the schoolyard and community garden. It is assumed that the building would have two entrances, one for each school organization, on Baltic and Butler Streets. The new school building would be designed to meet the SCA's current design standards and program requirements for general classrooms, special education classrooms, specialized instruction spaces (e.g., art and music programs), science laboratories, physical education and general assembly areas, and administration and student support space. Construction of the new school building is expected to begin in 2009, once the existing school building has been removed. The site of the old school will be incorporated into an approximately 15,500 sf active outdoor recreational area for the children and an approximately 3000 sf replacement community garden will be developed to the east of it. The entire site is expected to be developed in 2012, at which time the school would also be ready for occupancy.

1.2 PROBABLE IMPACTS OF THE PROPOSED PROJECT

1.2.1 Land Use and Zoning

The proposed project would not have a significant effect on land use conditions on the project site or surrounding area. The continued use of the site for a school would be compatible with the predominantly residential character of the study area and would not have an adverse effect on the surrounding community. The proposed project would not result in a change to the site's existing R8A/C2-4 and R6B zoning. However, based on the initial findings from the preliminary schematic report, the proposed project would not comply with all of the zoning's bulk regulations. Therefore, a zoning override may be required to allow the project to

be developed in non-compliance with the site's bulk requirements. The zoning override would apply only to the proposed project, and would therefore have no effect on the site's or surrounding area's underlying zoning designations.

1.2.2 Socioeconomic and Demographic Conditions

The proposed project would not result in substantial socioeconomic changes in the study area. The proposed project would not directly displace any residents or businesses nor would it introduce a new residential population that could indirectly affect socioeconomic conditions in the area. The proposed project would introduce approximately 54 additional faculty and staff who would potentially support local retail establishments near the project site. For these reasons, the proposed project would not result in significant adverse impacts to socioeconomic and demographic conditions.

1.2.3 Community Facilities

The proposed project is intended to improve the provision of school services by creating additional public school capacity on the project site, as it would replace the existing school with a larger, upgraded and expanded facility serving two school districts. The PS 133 elementary school would continue to operate at a temporary swing space nearby while the proposed new school facility is being constructed, and no significant disruption to school services would be expected to occur. Furthermore, the proposed project would not add residents to the area who could place an additional demand on community services. Therefore, the proposed project would not result in significant adverse impacts to community facilities and services.

1.2.4 Open Space and Recreational Resources

The proposed new school facility would not place any additional demand on the area's open space resources, as it would include a gymnasium and outdoor recreation areas to meet the recreational needs of the students. The proposed project would also include a community garden on a portion of the site's open area to replace the existing Baltic Street Community Garden at PS 133, which would be removed to facilitate the development of the proposed new school facility. The SCA has offered to assist in efforts to relocate and preserve off-site trees, vines, and other plants during the period of construction to the extent possible. Therefore, the proposed project would not result in a significant adverse impact to publicly accessible open space and recreational facilities.

1.2.5 Historic and Archaeological Resources

1.2.5.1 Historic Resources

The proposed project would require the removal of the existing PS 133 building, which is eligible for inclusion on the State and National Registers of Historic Places. As such, under Section 14.09 of the State Historic Preservation Act of 1980, this would result in an adverse effect. The SCA is currently in consultation with the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) to determine measures that would partially mitigate adverse impacts.

1.2.5.2 Archaeological Resources

The Preliminary Assessment/Disturbance Record report prepared for the project concluded that the site does not retain precontact or historic period archaeological sensitivity. The OPRHP is in the process of reviewing these preliminary findings. Therefore, pending the OPRHP's concurrence, the development of the proposed project would not result in significant adverse impacts to archaeological resources.

1.2.6 Urban Design and Aesthetics

The proposed removal of the historic school building would have a deleterious effect on the area's visual quality and localized views from Butler Street, but no significant impact to urban design or general visual quality. The significant northward view of the Williamsburg Savings Bank building from the study area will be unaffected by the proposed development. Therefore, the action would result in an adverse impact to existing visual quality, though not significant.

1.2.7 Neighborhood Character

The proposed project would not change the land use character of the site nor conflict with the mixed character of the immediate area. While the proposed project would require the removal of the historically significant PS 133 school building and its replacement with a new larger school facility, this would not significantly alter the character of the neighborhood since the building is not a defining element of the neighborhood and the character is so diverse. With the implementation of the recommended mitigation measures, the project's adverse traffic impacts would be eliminated and, therefore, would not affect the character of the neighborhood. The project's adverse noise impacts resulting from playground activity would be limited to the exterior rear yards of the two residential properties adjoining the eastern boundary of the school property and would not affect the overall character of the neighborhood. Therefore, the proposed project would not result in significant adverse impacts to neighborhood character.

1.2.8 Infrastructure and Energy

The proposed project would not result in significantly large water demands, nor would it generate significant wastewater flows. Therefore, no significant effects on the City's water supply system or wastewater treatment facilities would occur as a result of the proposed project. The proposed project would require a relatively small amount of energy consumption in relation to the total amount of energy used by the city as a whole. The proposed project would have no effect on the transmission or generation of energy, nor would it generate substantial indirect energy consumption.

1.2.9 Solid Waste

The proposed project would generate an incremental increase of approximately 2,088 pounds of solid waste per week, which is not considered a large amount. Therefore, the proposed project would not affect the delivery of sanitation services or place a significant burden on the City's solid waste management system.

1.2.10 Traffic and Transportation

The proposed project would result in significant adverse traffic impacts at the intersection of Fourth Avenue and Baltic Street during the AM and PM peak hours. During the AM peak hour, the southbound left turn movement would be impacted by project-generated trips. During the PM peak hour, the eastbound approach and southbound left turn movement would be impacted by project-generated trips. The project's traffic impacts could be fully mitigated by signal timing and phasing adjustments on Fourth Avenue (described in Section 1.3). However, if the New York City Department of Transportation (NYCDOT) elects not to implement the proposed mitigation measures, there could be unmitigated impacts at this intersection.

The proposed project would not result in any significant impacts to pedestrian, parking or transit conditions.

1.2.11 Air Quality

Based on a detailed microscale CO analysis, it was determined that the proposed project would not cause an exceedance of the NAAQS or the City's de minimis threshold values. The project would also not exceed

$PM_{2.5}$ thresholds for heavy-duty diesel vehicles. Therefore, the proposed project would not result in mobile source air-quality impacts.

An HVAC emissions screening analysis found that the proposed school building would have no impact on nearby taller residences since the distance between the two is greater (by 24 feet) than the threshold distance indicated in the *CEQR Technical Manual* appendix. Therefore, the proposed project would result in no significant stationary source air-quality impacts.

1.2.12 Noise

A mobile source noise screening analysis was performed. Since there would be no doubling of passenger car equivalents (PCEs) with the project, the proposed project would not result in mobile source noise impacts.

The reconfiguration of the schoolyard under the proposed action is predicted to increase noise levels at one location above the SCA's 5-dBA impact increment and thus would result in a significant adverse noise impact. With the development of the former school building site into active play area, the playground-generated noise levels will increase in the rear yards of the two adjacent rowhouses located at the eastern edge of the project site (fronting on Butler and Baltic Streets). The projected playground noise impacts would be limited to the exterior spaces of the rear yards of these residential properties since there are no windows on the side walls of these two buildings. The noise impact would also be limited to intermittent times of the day and year when the playground would be used by the students, which would be during school hours on weekdays (generally between 8:30 AM to 4:30 PM) during the school year (September to late June).

1.2.13 Soil, Groundwater and Hazardous Materials

The Phase I ESA identified recognized environmental conditions (RECs) associated with historic uses of the site property as a window shade factory; a textile factory; a furniture factory; and a cigarette factory. The historical site structures were demolished prior to 1985, and the demolition presents an additional on-site REC, as there is a potential that fill material was used to re-grade the site. Several environmental concerns were identified at the site, including one corroded 4,000-gallon steel-walled aboveground storage tank (AST) without current registration located in the basement of PS 133; suspect interior and exterior lead-based paints; suspect asbestos-containing materials; and suspect PCB-containing light ballasts and window caulk. The Phase I ESA also identified several RECs in close proximity to the site, including an auto repair shop to the north; a historic undertaker to the east; the historic presence of an auto top manufacturer, cabinet maker, and funeral home to the south; a historic metal goods manufacturing facility to the south-southeast; and a historic gasoline filling station and several historic gasoline storage tanks to the west. Three leaking underground storage tank (LTANK) facilities are considered RECs due to their presumed upgradient locations and the spills have not been closed, and the presence of six dry cleaning facilities located less than ¼ of a mile presumably upgradient from the site is considered a REC.

A Phase II ESI was completed in November and December 2008 on the proposed project site to assess the RECs identified in the Phase I ESA. The Phase II ESI consisted of a geophysical survey and the collection and analysis of subsurface soil, groundwater, soil gas, and ambient air samples. Petroleum odors, a petroleum sheen, and elevated PID readings were identified in the field in select borings during the soil investigation along the western boundary of the site. Considering the location and depth of the identified impacts, it is likely that the gasoline filling station to the west of the site is the source of the contamination; however no free phase product was observed, and the analytical results did not show any exceedances.

Soil vapor samples revealed the presence of several petroleum and chlorinated solvent-related VOCs and these compounds are migrating onto the site from an off-site source. Tetrachloroethene (PCE) and trichloroethene (TCE) exceeded their respective New York State Department of Health (NYSDOH) Air

Guidance Values (AGVs) in one soil vapor sample. Comparison of the concentrations to the NYSDOH guidance document matrices indicates that the response can range from no action to mitigation, depending on indoor air concentrations.

SVOCs, metals, and pesticides were detected in soil samples in excess of State Cleanup Objectives. The concentrations of lead exceeded the respective comparison criteria by at least an order of magnitude, and several samples exhibited hazardous characteristics.

The lead contamination is attributed to historic fill containing ash material brought in from an off-site source to re-grade the site.

Select VOCs, SVOCs, metals, and formaldehyde were detected in groundwater samples in excess of state groundwater standards/guidance values. Based on contaminant distribution, the groundwater contamination is migrating from an off-site source. The metal contamination in groundwater is likely attributable to suspended particulates as the samples were not filtered prior to analysis.

Based on the results of the Phase II ESI, a sub-slab depressurization system and a vapor barrier would be made part of the new school construction to prevent the potential migration of organic vapors, if any, into the proposed school building. During construction, the contractor would properly manage excavated soil in accordance with all applicable local, State and Federal regulations. Based on the results of waste characterization analyses, material should be disposed as hazardous waste. The contractor would be required to prepare plans for excavated soil management, dewatering, air quality control measures, dust and odor suppression measures and community air monitoring program (CAMP). In addition, to minimize the potential for construction workers' exposure, standard industry practices, including appropriate health and safety measures, would be utilized. A site-specific Health and Safety Plan (HASP) would be implemented during remediation, development and future maintenance activities. The HASP and CAMP would establish procedures for the protection of on-site workers and off-site residents. Finally, in all areas of the site not covered by the building structure, a five-foot-thick layer of environmentally clean fill would be placed over the site soils.

1.2.14 Natural Resources

The project site is fully developed and devoid of any natural resources. Per correspondence with the New York State Department of Environmental Conservation (NYSDEC), no threatened or endangered species or critical habitats have been identified on the site or in the immediate vicinity. Therefore, the proposed project would not result in significant adverse impacts to natural resources.

1.2.15 Construction Impacts

Construction of the proposed project would be expected to take approximately three years. Construction would be expected to begin in the late summer or early fall of 2009 and the project would be completed and ready for student occupancy by the start of the school year in 2012. Construction activities on the project site and construction-related traffic on nearby streets would likely cause temporary disruptive effects on the site and immediate environs. However, the project's construction-related effects would be temporary and of a relatively short-term duration.

Due to the complexity of maintaining school operation on the site during construction, the existing PS 133 elementary school would be relocated during construction to a temporary swing space at the St. Thomas Aquinas School located at Fourth Avenue and 8th Street. Prior to the SCA having secured this swing space, the construction plan entailed maintaining school operations for PS 133 in the existing school building while the new school facility is under construction. Under the original construction plan, the existing school building would have been demolished upon completion and student occupancy of the new school facility in

2012 and, following demolition, construction of the outdoor recreation areas and community garden would have been completed approximately one year later in 2013. Locating the school in a swing space would enable the site's full development in three years, including demolition of the existing PS 133 building and construction of the outdoor recreational spaces and community garden, prior to student occupancy in 2012. The use of the swing space would also avoid the disruptive effects that construction activities could have on the students, as well as eliminate the need for a variety of protective measures that would otherwise be required to protect the existing school building and its occupants during construction. The reduction in the overall construction period would also result in energy saving and would shorten the duration of the temporary disruptive effects from construction on the surrounding community by one year.

Therefore, given its temporary nature, construction of the proposed project would not result in significant adverse impacts.

1.2.16 Public Health Impacts

The proposed project would not generate any public heath concerns provided that the measures described in Section 1.2.13 are incorporated into the design and construction of the new school building. No impacts related to hazardous materials, air quality or sanitation services are anticipated as a result of the proposed action, and, therefore, the proposed project would not be expected to result in significant adverse impacts on public health.

1.3 MITIGATION MEASURES

1.3.1 Historic Resource Mitigation

The SCA has undertaken consultation with the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) regarding the proposed project and will continue, through the consultation process, to identify ways of partially mitigating the impact. Potential mitigation measures would include design features incorporated into the proposed new school building, photo-documentation of the existing structure consistent with the requirements of the Historic American Building Survey (HABS), and preservation and/or salvage of existing historic features. After further consultation with the OPRHP, the SCA would enter into a letter of resolution with OPRHP stipulating the specific mitigation measures that would be incorporated as part of the proposed project.

1.3.2 Traffic Mitigation

The proposed project would result in significant adverse traffic impacts at the intersection of Fourth Avenue and Baltic Street during the AM and PM peak hours.

During the AM peak hour, the southbound Fourth Avenue left turn movement would be impacted by project-generated trips. To address this impact, it is proposed to add a new 5-second lead phase to the southbound approach during the AM peak hour. This measure would fully mitigate proposed project's traffic impact during this time period.

During the PM peak hour, the southbound left turn movement and eastbound Baltic Street approach would be impacted by project-generated trips. To address these impacts, it is proposed to add a new 11-second lead phase to the southbound approach and also shift 4 seconds of green time from the north-south Fourth Avenue phase to the Baltic Street phase during the PM peak hour. This measure would fully mitigate proposed project's traffic impacts during this time period.

NYCDOT will review the proposed mitigation measures to evaluate the feasibility of their implementation. If the NYCDOT determines that the proposed mitigation measures are not practicable, the project's traffic impacts at the intersection of Fourth Avenue and Baltic Street would be unmitigated.

1.4 ALTERNATIVES TO THE PROPOSED PROJECT

1.4.1 No Build Alternative

Under the No Build Alternative, the SCA would not construct a new 960-seat Pre-K through Fifth grade public elementary school facility on the project site to expand capacity for CSD 13 and CSD 15. Accordingly, under this alternative, the existing PS 133 elementary school would continue to operate on the site and would be expected to remain at its current enrollment level of 264 elementary school students.

Unlike the proposed project, the No Build Alternative would also not be able to provide upgraded facilities to better accommodate the school's educational programs. Under this alternative, the DOE would not be able to expand the school's educational program to include students in the adjacent CSD 15.

This alternative would not result in the significant adverse impacts related to historic resources, traffic and noise, which would occur with the proposed project (though the historic resources and traffic impacts could be mitigated under the latter).

1.4.2 PS 133 Addition Alternative

Under this alternative, an approximately 77,280 SF addition to the existing PS 133 would be developed on the northern and western portions of the project site, and the interior of the existing 39,000 SF historic building would be rehabilitated, which together would result in an approximately 116,280 SF school facility. Based on preliminary schematic designs, the new school addition would be 4 stories (approximately 60 feet tall) with a basement level. This alternative would provide approximately 13,400 SF of outdoor recreation space, including a separate 2,400 SF outdoor play area for the youngest students. The interior renovation of the existing PS 133 building would commence upon completion and student occupancy of the new school addition.

As with the proposed project, this alternative would be designed to accommodate approximately 960 elementary school students, and would serve students from both CSDs 13 and 15. This alternative would be designed to provide the same facilities to meet the SCA's school program requirements as the proposed project. However, this alternative would provide approximately 5,000 SF less floor area and approximately 2,100 SF less outdoor recreation area for students than the proposed project. Due to this greater lot coverage, there would be no space for a replacement community garden, as there would with the proposed new school building.

Like the proposed project, this alternative would not result in significant adverse impacts related to land use and zoning; socioeconomic and demographic conditions; community facilities; open space and recreational facilities; neighborhood character; archaeological resources; urban design and aesthetics; infrastructure and energy; solid waste; parking, transit and pedestrian conditions; air quality; hazardous materials; natural resources; construction impacts; or public health.

The PS 133 Addition Alternative would result in the same significant adverse traffic impacts as would occur with the proposed project, and, as such, the same mitigation measures would be required. This alternative would also result in the same noise impacts from the playground as would occur with the proposed project. Compared to the proposed action, this alternative would have a reduced adverse impact to historic resources since the exterior of the historic school building would remain largely intact (though, the interior would be greatly modified). Under this alternative, the SCA would also consult with OPRHP regarding interior modifications to the historic building and the design of the addition to minimize or mitigate potentially adverse impacts to the historic school.