



THE CITY OF NEW YORK  
OFFICE OF THE MAYOR  
NEW YORK, N. Y. 10007

DENNIS M. WALCOTT  
DEPUTY MAYOR FOR EDUCATION AND COMMUNITY DEVELOPMENT

February 27, 2009

Hon. Elizabeth Crowley  
78-25 Metropolitan Avenue  
Middle Village, NY, 11379

Dear Councilmember Crowley:

The City Council Land Use Committee's subcommittee on Landmarks, Public Siting and Maritime Uses was slated to consider an application for a new, 1,100-seat high school in your district this past Monday, February 23, 2009 in advance of the Council's stated meeting on February 26.

At your request, however, we withdrew the application this week to allow for an additional month of discussion and consideration of the proposal. I very much hope you will support approval of the site at the Council's stated meeting in March, and wanted to recap the process that has brought us to this point.

A few points I'd like to emphasize:

1. The creation of a new high school in Maspeth is a crucial part of our overall plan to build new capacity and alleviate overcrowding in Queens. While we have worked to be responsive to your concerns and the concerns of your constituents, we are also obliged to consider the broader needs of the borough.
2. The application was introduced following an extensive, two-year process of community consultation, as well as discussions with you that began one month following your election on November 4, 2008.
3. Throughout the process and in response to your concerns, the School Construction Authority (SCA) and Department of Education (DOE) have made substantial changes to the proposed school, including a substantial capacity reduction and an enrollment priority for residents of District 24, secondary options for District 27 and District 28 and tertiary priority given to the borough of Queens.

### **The needs we are trying to meet**

There are pockets of overcrowding in a number of communities throughout the city and particularly in Queens. Several high schools in Queens have more than 1,000 students and utilization rates at or over 120%. These include: Newtown (129%), Grover Cleveland (128%), Aviation (120%), Cardozo (141%), Francis Lewis (175%), Bayside (152%), Richmond Hill (160%), Forest Hills (157%), Thomas Edison (150%) and Long Island City (147%). This is a problem that is not limited to any one district or neighborhood, and it requires a boroughwide solution.

As a result, the FY05-FY09 Capital Plan proposed that we build 10,000 high school seats in Queens, based on our review of existing overcrowding, population trends and housing growth. This is more than in any other borough except for the Bronx (where we also plan to build 10,000 seats).

We have already constructed 3,593 high school seats in Queens, and another 4,973 will open over the next 3.5 years. This, however, leaves 1,346 seats to be sited. As you know, dollars are increasingly tight, and sites are hard to find. That is why the construction of the new high school at issue, in Maspeth, is so crucially important. The Maspeth high school would have fulfilled our 10,000-seat commitment in its original, 1,650-seat incarnation, and will come close to doing so with a reduced capacity of 1,100 seats.

### **Two-year community consultation process**

A two-year dialogue with the community began in March 2007, when the principal and leadership team of P.S. 58 sent a letter to Schools Chancellor Joel Klein recommending that the site be considered for a new high school building. A year later, on March 14, 2008, we proposed a 1,650-seat high school for the site, and SCA began its formal public review process, with notification of the site selection published in a major newspaper and distributed to Queens Community Board 5, the City Planning Commission and local elected officials (including then-Councilmember Dennis Gallagher). A series of public meetings followed, attended by representatives of the SCA and DOE:

- On April 9, 2008, Community Board 5 held a public hearing at Christ the King High School;
- On April 29, 2008, we made a presentation to Community Education Council 24; and
- On May 4, 2008, SCA staff attended Community Board 5's Land Use Committee meeting at its request to discuss our proposal.

On May 14, Community Board 5 voted to oppose the site because they were still not confident that it would meet community needs. Two weeks later, on June 3, 2008, Anthony Como was elected to the Council. We proceeded to make several attempts to meet with then-Councilmember Como, who subsequently lost his seat to you in an election held on November 4.

### Enrollment reduction and district prioritization in response to your concerns

We then met with you on December 11, 2008, one month following your election, and presented revised plans that reduced the number of seats in the school by one-third, from 1,650 to 1,100. A reduction of 550 seats runs counter to our crucial objective of using limited tax dollars to create maximum capacity in response to the overcrowding problem in Queens that I have discussed. We made this accommodation, however, in the hope that the school would be more acceptable to you and your constituents and could earn your support. Two-thirds of a school, in our view, was better than no school at all.

On January 14, 2009, we presented the revised plan to Community Board 5, as we had committed to do before formally submitting the site for consideration by the Council. At that meeting, you were quoted in the *Daily News* as saying, "We are not going to stand for this school unless we are assured it is locally zoned." You again expressed this concern to me on January 27 at Gracie Mansion, citing five feeder schools for which you sought to provide sole access at the new high school.

As you know, however, DOE no longer creates such narrowly zoned high schools.<sup>1</sup>

Most practically, it is simply not possible to find sites in every individual neighborhood whose students need more school seats, nor is it fiscally responsible to target school construction dollars so narrowly. In this case, using the Maspeth site for a locally zoned school would not broadly address an overcrowding problem that exists throughout the borough and would not be fair or responsive to all the parents who deserve more high school seats.

More generally, zoned high schools have, historically, contributed to the persistence of a stratified school system and, in turn, an unequal distribution of resources. It is the nature of a diverse city that some communities can advocate for limited resources more effectively than others. If access to those resources—a new high school, for example—is then cut off to the rest of the city, the benefits flow unevenly to those well-organized, and, typically, more affluent communities. With high schools in particular, locally zoned facilities lead to a separate group of "have-nots" that get caught in a vicious cycle of low performance and low demand. This kind of locally-based pressure, and the distortions it can create, is precisely why there is a need for centralized control of the city's schools, and why we now create high schools open to all public school students—generally with enrollment priority for the borough in which a school is located—without regard to background or feeder school.

We therefore proceeded with a plan for a reduced-capacity, non-zoned high school with enrollment priority for residents of Queens. After discussions with City Council Land Use committee staff on January 30, 2009, we agreed to submit the proposal for approval by the Land Use subcommittee on February 23—rather than on February 9—to allow more time for deliberation.

In advance of the vote, you met with School Construction Authority President Sharon Greenberger and Deputy Chancellor Kathleen Grimm on February 19. In the meeting and in a follow-up letter sent later that day, you again asked that the school be locally zoned for students

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<sup>1</sup>The final "zoned" high school was Metropolitan High School, approved in 2004, in order to honor a commitment made by former Schools Chancellor Harold Levy.

from five specific feeder schools.

In an effort to balance our broader obligations with the practical need for your support, while we could not agree to local zoning feeder schools, DOE responded with a proposal to give enrollment priority at the new school to students in District 24; secondary priority to students in two neighboring and overcrowded districts, Districts 27 and 28; and tertiary priority to residents of the remainder of Queens. This would mean, practically, that students from the five schools you identified, along with some of their neighbors and students from a neighborhood or two away, would have first access to the new school. This method of prioritization was broader than the one you sought, but narrower than at any high school we have initiated during Chancellor Klein's tenure.

#### **Withdrawal of Council proposal at your request**

I know that you felt that a Council vote this week would come too quickly on the heels of this proposed change. Despite the extensive back-and-forth outlined above, we reluctantly agreed to withdraw the proposal to give you and your constituents yet more time to consider it. Please know that my staff, the Department of Education, and I are at your disposal, at City Hall or in your district, over the coming weeks before the Council's next stated meeting. I know we have scheduled at least one meeting to discuss your concerns about enrollment and capacity planning for your district, in general.

#### **Going forward**

In less than four months since your election, your vigorous advocacy has resulted in substantial changes to the plan for this school: a reduction of seats by 33% and enrollment priority for District 24 students. When it is complete, the school will be a tremendous and much-needed asset for your district and for your borough.

With each delay, however, it becomes more likely that the funding for this school will be moved to next fiscal year's capital plan, which puts the project at some risk in the current budget climate. For this reason, two years after this conversation was initiated, we will not be able to delay the vote past the March stated meeting.

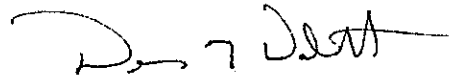
Additionally, at a time when demand throughout the City for school construction dollars greatly outstrips supply, we cannot justify spending \$80 million in a specific district for a narrow few when its expenditure elsewhere would give a substantially larger and broader group of students access to a new facility. For this reason, we cannot compromise our obligation to all students and city taxpayers by limiting access to this school or further reducing its size. If the proposal is, therefore, unacceptable to you, we may reluctantly redirect the committed resources to another neighborhood where there is both need and support. It would be the first time, to my knowledge, that the City Council has rejected a new school.

Though I do understand the pressure on a local elected official to advocate for the needs of students in his or her district, I would ask you to balance this pressure against the needs of an entire borough of schoolchildren without enough options and a government with increasingly limited resources. Together, we have a responsibility to do the best we can for every neighborhood in New York City.



With all this in mind, I am hopeful that you will support approval of the site at the Council's stated meeting in March.

Sincerely,

A handwritten signature in black ink, appearing to read "Dennis M. Walcott", with a long horizontal flourish extending to the right.

Dennis M. Walcott  
Deputy Mayor

cc: Hon. Christine Quinn, City Council Speaker  
Hon. Melinda Katz, Chair, City Council Committee on Land Use  
Hon. Jessica Lappin, Chair, City Council Land Use Subcommittee on Landmarks, Public Siting and Maritime Uses  
Hon. Leroy Comrie, Chair, City Council Queens Delegation  
Hon. Robert Jackson, Chair, City Council Committee on Education

My name is Sylvia Baga and I am a parent of 3 children in D24. I am here today to speak in favor of the proposed High School in Maspeth.

I have been a member of the Maspeth Community for 35 years. I have seen the High Schools in D24 explode at the seams. The Community Board 5 voted in favor of the High School I believe 38-8. There are ~~more~~ ~~than~~ 36,000 K-8 children in D24 who would benefit from this school. I believe that these children deserve a Comprehensive High School.

- This site is easily accessible by public transportation, and has ample ~~near~~ by parking.

- The schools are only in operation for approx. 180 days a year.

- The school day is approximately 6 hrs long. ~~that~~ and therefore not a constant burden on the community with short windows of arrival and dismissal times.

Our children are not monsters, criminals and ~~some~~ some community members



Sharon L. Greenberger  
President & CEO

[sgreenberger@nycsca.org](mailto:sgreenberger@nycsca.org)

March 13, 2009

The Honorable Christine C. Quinn  
Speaker of the City Council  
City Hall  
New York, New York 10007

Dear Speaker Quinn:

The New York City School Construction Authority (the Authority) has undertaken its site selection process for the following proposed school:

- New, Approximately 1,100-Seat High School Facility, Queens
- Block 2803, Lot 1
- Northwest Corner of 57<sup>th</sup> Avenue and 74<sup>th</sup> Street
- Community School District No. 24
- Queens Community Board No. 5

The project site contains a total of approximately 84,000 square feet (1.93 acres) of lot area and is located at the northwest corner of 57<sup>th</sup> Avenue and 74<sup>th</sup> Street in the Maspeth section of Queens. The site is privately-owned and currently contains a one-story warehouse structure and open parking area. Under the proposed project, the SCA would acquire the site, demolish the existing on-site structure, and construct a new, approximately 1,100-seat high school facility in the Borough of Queens.

The Notice of Filing of the Site Plan was published in the New York Post and the City Record on March 14, 2008. At the time, the Authority proposed to acquire the site for the construction of a new, approximately 1,650-seat intermediate/high school facility serving students in grades six through twelve. Queens Community Board No. 5 was notified on March 14, 2008, and was asked to hold a public hearing on the proposed Site Plan. Queens Community Board No. 5 held its public hearing on April 9, 2008, and subsequently sent written comments recommending against the proposed Site Plan. The City Planning Commission was also notified on March 14, 2008, and it recommended in favor of the proposed site.



The Authority considered all comments received on the proposed project and has modified the proposed Site Plan pursuant to §1731.4 of the Public Authorities Law. The Authority now proposes to acquire and develop the site with a new, approximately 1,100-seat high school facility serving grades nine through twelve. In accordance with §1732 of the Public Authorities Law, the Authority submitted the enclosed Site Plan to the Mayor and the Council on February 18, 2009. At the Council's request, that application was subsequently withdrawn on February 23, 2009. In accordance with §1732 of the Public Authorities Law, the Authority is hereby resubmitting the Site Plan for consideration by the Mayor and Council. Enclosed also are copies of the Environmental Assessment and Negative Declaration that have been prepared for this project.

The Authority looks forward to your favorable consideration of the proposed Site Plan. If you have any questions regarding this Site Plan or would like further information, please contact me at (718) 472-8001 at your convenience.

Thank you for your attention to this matter.

Sincerely,

A handwritten signature in cursive script, appearing to read "Sharon L. Greenberger".

Sharon L. Greenberger  
President & CEO

Encl.

- c: Hon. Michael R. Bloomberg (w/o attachments)
- Hon. Melinda Katz, Land Use Committee
- Hon. Jessica Lappin, Subcommittee on Landmarks, Public Siting  
and Maritime Uses
- Hon. Elizabeth Crowley, District Councilmember
- Kathleen Grimm, Deputy Chancellor for Finance and Administration



May 21, 2008

Community Board 5, Queens

Sharon L. Greenberger  
President & CEO  
NY City School Construction Authority

cc: continued from page 1

✓ Ross J. Holden, V.P. & Counsel- NYC School Construction Auth.  
✓ Kenrick Ou, Operations Director- NYC SCA Real Estate Div.  
Community Education Council - School District 24  
Mary Leas, Queens Mgr. for Community Rel. - NYC SCA  
Hon. Serphin Maltese, NY State Senator  
Hon. Margaret Markey, NY State Assembly Representative  
V. Arcuri, W. Sanchez, V. McDermott & M. Caruana - CB5Q  
Roe Daraio, President, COMET Civic Association

May 21, 2008

Community Board 5, Queens

RESOLUTION / RECOMMENDATION

RE: Proposed Intermediate School/High School  
for Approximately 1,650 Students, on  
74 Street at 57 Avenue in Maspeth, Queens

Residents, who spoke in opposition of this proposed school at the Board 5, Queens hearing, stressed that Grand Avenue and 57 Avenue are at a virtual traffic standstill during significant portions of the day currently. IS 73 overwhelms the nearby area with so many city buses to transport students across Queens Blvd., to the extent that Q-58 buses make special stops on the 71 Street side of I.S. 73.

Residents have also stated their concerns that problems with unruly pre-teens and teens along Grand Avenue, after school, will be much worse if an IS/HS is built less than one block from Grand Avenue and very close to IS 73.

Those living near the proposed school have stated that, with 170 staff expected to work at this IS/HS, parking problems and area traffic congestion will increase significantly.

At the May 6th meeting of the Zoning and Land Use Review Committee, several members stated that a 1,000 seat school would be more reasonable at the proposed location and that there is already an intermediate school within 5 blocks of the site in question. Again, committee members agreed that more high school seats are much needed for teenagers living in Maspeth and nearby communities.

After additional discussion at the May 6th meeting, the members of the Zoning and Land Use Review Committee unanimously agreed that an intermediate/high school should not be built for as many as 1,650 students on the northwest corner of 74 Street at 57th Avenue in Maspeth, Queens for the following reasons:

- That the site in question is less than one block away from an existing 1,000 student elementary school and in very close proximity to Intermediate School 73, which serves approximately 1,700 students.
- That a school building that is 4 stories tall and 70 Feet in height is out of character with the adjacent residential community.
- That the plan for a school at this location does not include any on site provisions for staff parking in a portion of the community that is already overwhelmed with parking demands.
- That IS 73, which is only a few blocks away from this proposed school site, is reportedly at only 90% capacity, which indicates that an intermediate school component at this proposed site is not necessary.



CITY PLANNING COMMISSION  
CITY OF NEW YORK  
OFFICE OF THE CHAIR

April 25, 2008

Sharon L. Greenberger  
President & CEO  
New York City School Construction Authority  
30-30 Thomson Avenue  
Long Island City, NY 11101-3045

Dear Ms. Greenberger:

This is in response to your letter of March 14, 2008 in which notice was given to the City Planning Commission of the proposed site selection of Block 2803, Lot 1 in the borough of Queens (Community District 5) for a new 1,650-seat intermediate/high school facility in Community School District 24.

In view of the need for new intermediate and high school seat capacity in Queens, the City Planning Commission recommends in favor of the proposed site for an intermediate/high school facility.

Very sincerely,

A handwritten signature in black ink, appearing to read "A.M. Burden", with a stylized flourish at the end.

Amanda M. Burden

c: Ross Holden  
Kathleen Grimm  
Betty Mackintosh  
John Young

Amanda M. Burden, AICP, Chair  
22 Reade Street, New York, NY 10007-1216  
(212) 720-3200 FAX (212) 720-3219  
nyc.gov/planning



## ALTERNATE SITE ANALYSIS

**NEW, APPROXIMATELY  
1,650-SEAT INTERMEDIATE/HIGH SCHOOL  
54-44 74<sup>TH</sup> Street  
Block 2803, Lot 1  
School District 24, Queens**

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The following locations were also considered as potential sites for a school in Western Queens.

1. **3502-3518 35<sup>th</sup> Street (Block 639, Lot 16)** - This 43,000 square foot City-owned property was partially leased to the Kaufman Astoria Studios for use as parking. A feasibility study and an environmental review found the property suitable for a school. The Department of Education acquired the Kaufman Astoria Studios leasehold interest in the property and jurisdiction over the entire site. The 1,000-seat Frank Sinatra School of the Arts is currently under construction at the site.
2. **45-10 94<sup>th</sup> Street (Block 1600, Lot 61)** – This site consists of an approximately 237,000 square foot former industrial building and 70,000 square feet of land. A feasibility study was prepared and environmental evaluation was completed. The property was deemed suitable for construction of a school, and construction is currently underway for an approximately 1,600-seat intermediate/high school at this site.
3. **55-02 Broadway (Block 1194, Lot 32)** – This property contains approximately 36,000 square feet, and is located in a M1-1 zoning district. The property is on the market. A feasibility study was prepared, which concluded that a school could physically fit on the site. Environmental due diligence is currently underway, and the site remains under consideration.
4. **53-01 37<sup>th</sup> Avenue (Block 1192, Lot 101)** – This 26,000 square foot property, in a M1-1 zoning district, was offered for sale. A preliminary review determined that the site was highly irregular and abutted a railroad right-of-way. It was determined that given its size, shape and location, this property would not be suitable for school. The site was dropped from further consideration.
5. **33-20 55<sup>th</sup> Street (Block 1193, Lot 62)** – This 21,000 square foot property is located in an M1-1 zoning district and improved with a 21,000 square foot industrial building. The property was put on the market for sale. The Department of Education conducted a preliminary review and determined that the site would not be suitable for school due to the property's relatively small size and irregular configuration, as well as its adjacency to railroad right of way and industrial context. Therefore, the property was dropped from consideration.

March 14, 2008



Vincent Arcuri, Jr.  
Chairperson  
Queens Community Board No. 5  
61-23 Myrtle Avenue  
Glendale, New York 11385

**Re: New, Approximately 1,650-Seat Intermediate/High School, Queens  
Community School District No. 24**

Dear Mr. Arcuri:

Pursuant to §1731 of the New York City School Construction Authority Act, notice is hereby given of the proposed site selection of Block 2803, Lot 1, and any other property in the immediate vicinity which may be necessary for the proposed project, located in the Borough of Queens, for the development of a new, approximately 1,650-seat intermediate/high school facility in Community School District No. 24. The site is a privately-owned property that contains a one-story warehouse building and open parking area.

Section 1731.2 states that within thirty (30) days of this notice, a public hearing with sufficient public notice shall be held by each affected community board on any or all aspects of the Site Plan. You may request the attendance of representatives of the Authority or Department of Education at this hearing.

In addition, §1731.3 states that within forty-five (45) days of this notice, each affected community board shall prepare and submit to the Authority written comments on the Site Plan. Attached please find copies of the Notice of Filing, Site Plan, and the Alternate Sites Analyses for this proposed action. The Authority will accept public comments on this proposed Site Plan until April 28, 2008. All comments will be taken into consideration in the Authority's final decision regarding this matter.

If you require any additional information, please contact Ross J. Holden, Vice President and General Counsel, at (718) 472-8220.

Sincerely,

A handwritten signature in black ink, appearing to read 'Sharon L. Greenberger', written in a cursive style.

Sharon L. Greenberger  
President & CEO

c: Kathleen Grimm, Deputy Chancellor for Finance & Administration  
Gary Giordano, District Manager, Queens Community District No. 5

NEW YORK CITY SCHOOL  
CONSTRUCTION AUTHORITY

March 14, 2008



The Honorable Christine C. Quinn  
Speaker of the City Council  
City Hall  
New York, New York 10007

**Re: New, Approximately 1,650-Seat Intermediate/High School, Queens  
Community School District No. 24**

Dear Speaker Quinn:

Attached please find copies of the site selection notification for the selection of Block 2803, Lot 1, and any other property in the immediate vicinity which may be necessary for the proposed project, located in the Borough of Queens, for the development of a new, approximately 1,650-seat intermediate/high school facility in Community School District No. 24. The site is a privately-owned property that contains a one-story warehouse building and open parking area.

This notification was sent to Queens Community Board No. 5 and the City Planning Commission. The Notice of Filing for this site selection will be published in the New York Post and City Record on March 14, 2008, and the SCA will continue to accept public comments until April 28, 2008.

I have also attached the Site Plan and Alternate Sites Analyses for your review. If you require any additional information, please do not hesitate to contact Ross J. Holden, Vice President and General Counsel, at (718) 472-8220.

Sincerely,

Sharon L. Greenberger  
President & CEO

Attachments

c: Kathleen Grimm, Deputy Chancellor for Finance & Administration  
Hon. Melinda Katz, Land Use Committee  
Hon. Jessica Lappin, Subcommittee on Landmarks, Public Siting & Maritime Uses  
Hon. Dennis P. Gallagher, District Councilmember  
Gail Benjamin, Director, Land Use Division  
Alonzo Carr, Land Use Division



March 14, 2008

The Honorable Serphin R. Maltese  
New York State Senate, 15<sup>th</sup> District  
District Office  
71-04 Myrtle Avenue  
Glendale, New York 11385

**Re: New, Approximately 1,650-Seat Intermediate/High School, Queens  
Community School District No. 24**

Dear Senator Maltese:

Attached please find copies of the site selection notification for the selection of Block 2803, Lot 1, and any other property in the immediate vicinity which may be necessary for the proposed project, located in the Borough of Queens, for the development of a new, approximately 1,650-seat intermediate/high school facility in Community School District No. 24. The site is a privately-owned property that contains a one-story warehouse building and open parking area.

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Sincerely,

A handwritten signature in cursive script, appearing to read "Sharon L. Greenberger". The signature is fluid and somewhat stylized, with the first and last names being the most prominent.

Sharon L. Greenberger  
President & CEO

Attachments

c: Kathleen Grimm, Deputy Chancellor for Finance & Administration



**STATE ENVIRONMENTAL QUALITY REVIEW  
NEGATIVE DECLARATION  
NOTICE OF DETERMINATION OF NON-SIGNIFICANCE**

**DATE:** February 13, 2009  
**SEQR PROJECT NO.:** 09-005  
**LEAD AGENCY:** New York City School Construction Authority  
30-30 Thomson Avenue  
Long Island City, New York 11101-3045

This notice is issued pursuant to Part 617 of the implementing regulations pertaining to Article 8 (State Environmental Quality Review Act) of the Environmental Conservation Law. Pursuant to §1730.2 of the Public Authorities Law, the New York City School Construction Authority (SCA) is SEQR Lead Agency.

The SCA, as Lead Agency, has determined that the proposed action described below will not have a significant effect on the quality of the environment, and a Draft Environmental Impact Statement (DEIS) will not be prepared.

**NAME OF ACTION:** Maspeth High School Facility  
New, Approximately 1,100-Seat  
High School Facility, Queens  
**LOCATION:** 73-35 57th Avenue and 54-44 74th Street  
Maspeth, Queens County  
Tax Block 2803, Tax Lot 1  
**SEQR STATUS:** Unlisted

**NEGATIVE DECLARATION**

**Description of Action:**

On behalf of the New York City Department of Education (DOE), the New York City School Construction Authority (SCA) proposes the site selection, acquisition, acceptance of construction funding, and construction of a new, approximately 1,100-seat high school facility in Maspeth, Queens. The proposed facility would accommodate two high school organizations serving students in grades 9 through 12, as well as District 75 (special education) students. Acquisition, design and construction of this proposed facility would be conducted pursuant to DOE's Five-Year Capital Plan for Fiscal Years 2005-2009.



The proposed site is located at the northwest corner of 57<sup>th</sup> Avenue and 74<sup>th</sup> Street (Block 2803, Lot 1), and is privately-owned. The site contains a total of approximately 84,071 square feet of lot area, and is occupied by a vacant one-story building and its accessory parking lot.

The purpose of the proposed project is to provide additional permanent capacity at the high school level in the Borough of Queens, and within Maspeth in particular, which does not contain a high school facility. The DOE's Five-Year Capital Plan for Fiscal Years 2005-2009 identified a need for 9,912 additional high school seats in Queens in order to address existing overcrowding and forecast changes in student enrollments. Overall, high schools in Queens are over utilized at a rate of 108 percent. Nearby high schools in District 24, Newtown High School and Grover Cleveland High School are over utilized at a rate of 127 and 129 percent, respectively – two of the most over-utilized high schools in the city.

Under the proposed project, the SCA would acquire the site, demolish the existing on-site structure, and construct a high school building on the site. The proposed new facility would contain approximately 148,280 gross square feet, consisting of classrooms, special educational facilities, library, gymnasium, cafeteria, kitchen, labs, medical suite, storage facilities, locker rooms, custodial spaces and an administrative/support space. A large outdoor recreational area would be located behind the school structure and would include a walking track, fitness equipment, trees and plantings. The main entrance to the school facility would be located on 74th Street.

#### **Reasons Supporting This Determination:**

A comprehensive Environmental Assessment Form (EAF) and Supplemental Environmental Studies for this action were completed and issued on February 13, 2009. Based upon those documents (which are appended hereto), the SCA has determined that the proposed project will have no significant adverse impacts on environmental conditions related to the following areas: land use, zoning and public policy; socioeconomic conditions; community facilities; open space; shadows; historic and archaeological resources; urban design and visual resources; neighborhood character; natural resources; hazardous materials; waterfront revitalization program; infrastructure; solid waste and sanitation services; energy; traffic and parking; transit and pedestrians; air quality; noise; construction impacts; and, public health.

The key findings of related to the analyses of the following two environmental impact areas in the Environmental Assessment are discussed in greater detail below.

#### ***Traffic***

For the streets in the vicinity of the site, future intersection volumes would generally increase over existing traffic volumes, but those increases could be accommodated by the street capacities for the majority of the locations. However, based on City



New, Approximately 1,120-Seat High School Facility, Queens  
SEQR Project No. 09-005  
Negative Declaration  
February 13, 2009

Environmental Quality Review (CEQR) standards, the proposed project could result in significant impacts at five (5) local intersections during the analyzed peak periods. The traffic analysis also indicated that those impacts could be mitigated through relatively simple, low-cost, and conventional traffic engineering methods as described in greater detail below. These improvements are subject to review and approval by the New York City Department of Transportation (NYCDOT):

Grand Avenue and 69<sup>th</sup> Street

An impact because of the project-generated traffic will occur at the southbound approach in the AM peak hour with a change in the Level-of-Service (LOS) from LOS C to LOS E. There will also be an impact in the PM peak hour, with a change in the LOS from LOS D to LOS E. This impact at the southbound approach during the AM and PM peak hours could be mitigated by shifting three (3) seconds of green time from the eastbound/westbound phase to the northbound/southbound phase.

Grand Avenue and 72<sup>nd</sup> Place

An impact in the PM peak hour will occur at the northbound left-turn movement because of the project-generated traffic. The northbound left-turn movement will continue to operate at LOS D with delays increasing from 42.9 seconds under the No Build condition to 49.4 in the Build condition. This impact could be mitigated by shifting one (1) second of green time from the eastbound/westbound phase to the northbound/southbound phase.

Grand Avenue and 74<sup>th</sup> Street (Signalized)

An impact in the AM and PM peak hours will occur at the eastbound and northbound approaches of this intersection. In the AM peak hour, the eastbound approach will deteriorate from LOS C to LOS E and the northbound approach will deteriorate from LOS D to LOS F. In the PM peak hour, the eastbound approach will deteriorate from LOS D to LOS F, and the northbound approach will deteriorate from LOS C to LOS E. The impacts at the eastbound and northbound approaches during the AM and PM peak hour could be mitigated by restricting parking on these approaches (permitted under existing conditions) for approximately 150 feet and re-striping both approaches as follows:

- Re-stripe the eastbound approach to provide one left-through and one right turn lane, each 12 feet wide.
- Re-stripe the northbound approach to provide one 12-foot left-through lane and one 12-foot right turn lane.

In addition, mitigation would include shifting three (3) seconds of green time from the eastbound/westbound phase to the northbound/southbound phase during the AM peak hour.



Grand Avenue and 74<sup>th</sup> Street (Unsignalized)

The impact at the southbound approach at this intersection will occur during both the AM and PM peak hours. The southbound approach will continue to operate at LOS F during the AM peak hour with delays increasing from 60.9 seconds under No Build conditions to 140.5 seconds under Build conditions. During the PM peak hour this approach will continue to operate at LOS F with delays increasing from 70.9 seconds under No Build conditions to 121.4 seconds under Build conditions. This impact at the southbound approach during the AM and PM peak hours could be mitigated by installing a traffic new signal.

57<sup>th</sup> Avenue and 74<sup>th</sup> Street

An impact in the AM peak hour will occur at the westbound approach which would continue to operate at LOS F with delays increasing from 90.2 seconds under the No Build to 115.8 seconds under the Build conditions. The southbound approach will also be impacted in the PM peak hour, where the LOS would deteriorate from LOS B under the No Build conditions to LOS F under the Build conditions. These impacts could be mitigated by prohibiting parking for 150 feet along the north curb and moving the centerline 2 feet south to create a 13½ foot-wide shared left, through and right-turn lane. In addition, the mitigation would include shifting one (1) second of green time from the northbound/southbound phase to the eastbound/westbound phase in the AM, and shifting two (2) seconds of green time from the eastbound/westbound phase to the northbound/southbound phase in the PM.

As part of the proposed project, the SCA will petition NYCDOT to implement the traffic signal timing adjustments, lane re-striping, and curbside parking restrictions necessary to avoid significant adverse traffic impacts due to the new school's operations. Also, the SCA shall petition NYCDOT to install a new traffic signal at the unsignalized intersection of Grand Avenue and 74<sup>th</sup> Street prior to the opening of the new school.

As part of the proposed project, the SCA will petition NYCDOT to implement the traffic signal timing adjustments, lane re-striping, and curbside parking restrictions necessary to avoid significant adverse traffic impacts due to the new school's operations. Also, the SCA shall petition NYCDOT to install a new traffic signal at the unsignalized intersection of Grand Avenue and 74<sup>th</sup> Street prior to the opening of the new school.

***Soil and Groundwater Conditions***

As part of the evaluation of the site's soil and groundwater conditions, A Phase I Environmental Site Assessment (ESA) was prepared in March 2008. The Phase I ESA identified recognized environmental conditions (RECs) associated with the historic presence of nearby automobile service stations, dry cleaners, a salvage yard, manufacturing facilities, and a former gas manufacturing facility.

Based on the Phase I ESA, further study in the form of a Phase II Environmental Site Investigation (ESI) was completed in March 2008. The Phase II ESI identified





New, Approximately 1,120-Seat High School Facility, Queens  
SEQR Project No. 09-005  
Negative Declaration  
February 13, 2009

elevated concentrations of petroleum-related volatile organic compounds (VOCs) and tetrachloroethene (PCE) in soil vapor and the presence of elevated concentrations of semi-volatile organic compounds (SVOCs) and metals in the soil.

Based on the results of the Phase II ESI, the SCA has identified and developed measures that will be incorporated into the construction of the new school facility. The SCA will install a soil vapor barrier and an active sub-slab depressurization system as part of the new school's construction to prevent potential migration of organic vapors into the new building. Also, during construction, the SCA's contractor shall properly manage excavated soils in accordance with all applicable local, State and Federal regulations. For areas of the site where exposed soils may exist (e.g., landscaped areas), a twenty-four (24) inch thick layer of certified-clean fill will be placed over those soils. In addition, to minimize construction workers' potential exposure, standard industry practices, including appropriate health and safety measures, will be utilized. Since these measures will be implemented as part of the proposed project, no adverse impacts would occur to construction workers or school occupants.

The proposed project would have the beneficial impact of providing approximately 1,120 additional seats of permanent public school capacity at the high school level in the Borough of Queens and in the community of Maspeth. This additional capacity would facilitate DOE's ongoing policy initiatives, including relieving the overcrowding of existing Queens high school facilities, such as Newtown and Grover Cleveland High Schools.

For further information contact:

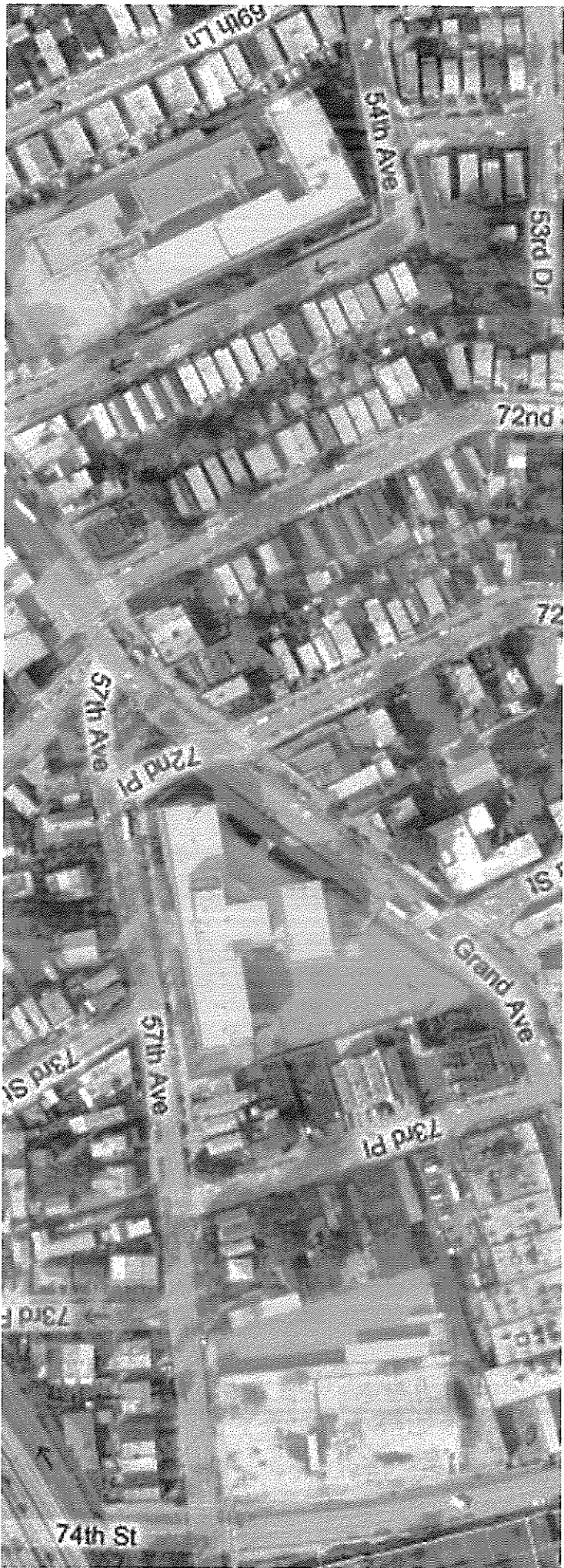
Contact: Ross J. Holden  
Vice President and General Counsel

Address: New York City School Construction Authority  
30-30 Thomson Avenue  
Long Island City, New York 11101-3045

Telephone: (718) 472-8220

  
\_\_\_\_\_  
Sharon L. Greenberger  
President & CEO

February 13, 2009  
Date



1573,

PS 58 ↓

PARSONS  
HIGH  
SCHOOL ↓





WANNKA

DERIVAN (CHICKEN)

URANT

Tel: 476-9680



CS BAGGERS

71-02

Breakfast

Lunch

Catering

Wholesale

718-478-1343

美味宮  
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ASPIRITY TRANSPORTATION INC.

(P)

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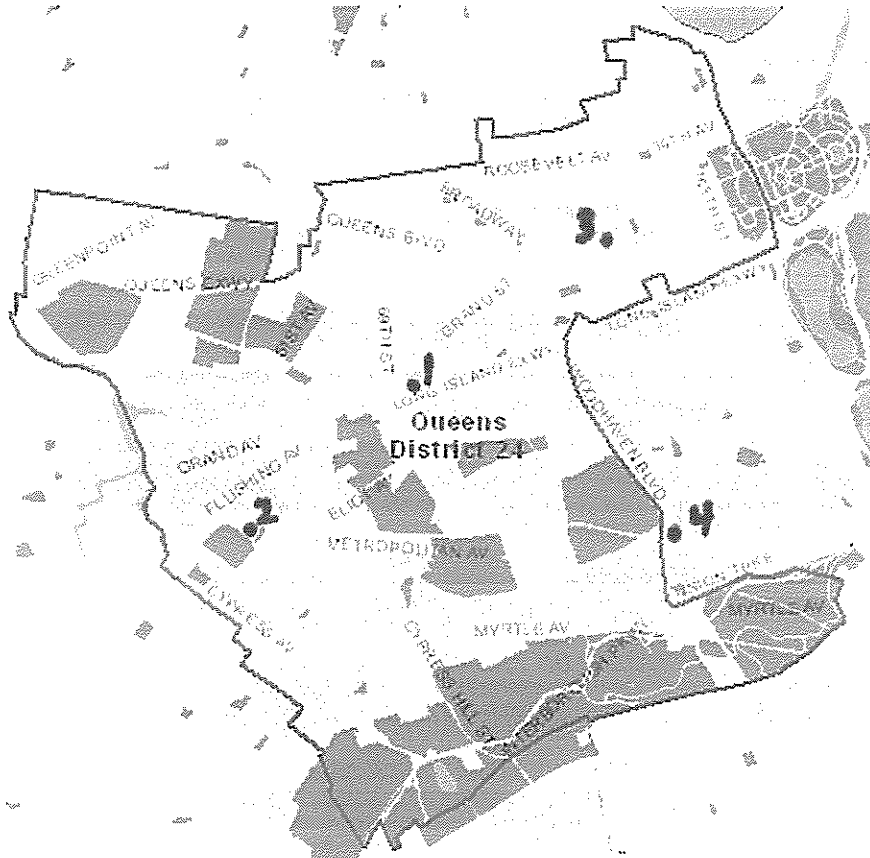
1 – Stop & Shop supermarket with rooftop parking

2 – P.S. 58 – K-6 school with current enrollment of 967 + approx. 100 D75 students

3 – Proposed site for 1,150 seat high school

4 – Stop & Store – self-storage facility

5 – New park under construction (Elmhurst Park)



1. Proposed site in Maspeth for 1,150 seat High School
2. Current site of Grover Cleveland HS - enrollment of 2,715; capacity of 2,297; over: by 418
3. Current site of Newtown HS - enrollment of 3,138; capacity 2,597; over by 541
4. New HS under construction with 500 (I think) seats designated for D24 priority

Some D24 students attend:

Long Island City HS (D30) enrollment of 3,130; capacity of 2,314 – over by 816

Forest Hills HS (D28) enrollment of 3,665; capacity of 2,314 – over by 1,351

Francis Lewis HS (D26) – enrollment of 4,453; capacity of 2,572 – over by 1,881 (173% capacity)

Wm. Bryant (D30) – enrollment of 3,048; capacity of 2,872 – over by 176

**Resolution by D24 Presidents' Council Concerning New High School for Maspeth**

Be it hereby resolved that the Community School District 24 Presidents' Council (the group of all the PA/PTA Presidents, or their designees, for the 34 primary and middle schools in District 24) strongly supports the new 1,100 seat high school being proposed for Maspeth (74<sup>th</sup> St. & 57<sup>th</sup> Ave.) and also supports priority zoning for D24 students as has been proposed by the DOE.

The D24 Presidents' Council also seconds the desire expressed by Community Board 5 that the high school be one 1,100-seat comprehensive high school, not two 550-seat themed schools. We have proven in so many of our Queens high schools that large high schools CAN work and we want this new school to provide an education which will be attractive to ALL the students in our district, not just those interested in the peculiar themes which may be chosen by Central.

Approved on the 24 date of March, 2009 by the following D24 Presidents' Council Members:

Name:

School Represented:

Roseanne Scatered	PTA Pres
Cathy S' Sutter	IS 119
Deborah Schermer	PS 49
Remy Murtha	PS 153
[Signature]	PS 61 (PTA President)
Elvira Gonzalez R.	P.S. 12 (PTA president)
Rosita Cali	P.S. A 143 (President)
Elizabeth Manceno	PS 934 PTA Co-President
Kara Montz	IS. 05 Q - President
FARIDA SAADAT	51 EV (President)
Ludia Martinez	PTA President
Marge Koller	PS 229 PTA Pres - designee / President D24 Pres Council



Lorraine Sciuilli JPCA, PO Box 275 Middle Village  
Maspeth High School (2)

honesty by the School Construction Authority! "They lie like rugs" as was recently stated at the CB5, Queens meeting on March 11th.

There is inadequate transportation to and out of the area because of the LIE to the South and a huge Stop & Shop Parking lot to the North. With no drop-off lane accommodation, school buses will prowl the area wreaking their own havoc on residents and passersby, again making maneuvering in Maspeth a nightmare.

The school would put an added burden on the 104th Pct, already overburdened with too little police to do the job right now.

Here's an interesting statistic - In Maspeth 70% of the residents do not even have kids in the public schools. The surrounding areas have the larger population in need of schools, so common sense would be, why not build the school in the areas where the need is greater rather than overburdening Maspeth with more cars, buses and students?

The DOE leads parents in Maspeth to believe that this school will be for their kids when we know that's not the reality. There are no locally zoned schools in District 24 and this proposed school in Maspeth would be no different. It will no doubt be a themed school thus open to all the kids in NYC and not locally zoned for the children in Maspeth. That begs the question, why should the small town of Maspeth with its own fragile infrastructure continue to pack in more schools and students? Parents of school children should do their own homework, get themselves educated and get the facts as they exist rather than just listening and being duped by groups like the UFT and the PTA that have their own agenda.

There should be a way of building schools so that all the communities have an equal shot at having an equal number of schools in their neighborhoods. That would be fair but the DOE

3

doesn't deal in the "fair" game. They take a dart and throw it at a map and where it lands is where you get a school. Very scientific! The DOE is ruining the small town of Maspeth with schools, students, cars, buses and problems.

It's wrong to saturate Maspeth with so many schools. It is wrong to use the small town of Maspeth as the school campus for District 24.



69-07 58<sup>th</sup> Road  
Maspeth, NY 11378

March 31, 2009

Hon. Jessica Lappin, Chair  
New York City Council Land Use Subcommittee on Public Siting  
City Hall  
250 Broadway  
New York, NY 10001

Re: Testimony before the New York City Council Land Use Subcommittee meeting against the proposed public high school in Maspeth.

Dear Ms. Lappin:

I am testifying against the proposed high school at 74<sup>th</sup> Street and 57<sup>th</sup> Avenue in Maspeth for two simple reasons.

The first reason is that public transportation to this area is already overburdened. With students expected to commute from all over Queens, and perhaps the entire City, to attend this school, the Q58 bus line is really the only option for them to get to this site from the subway, which is located about a mile away. The Q58 moves an average of 6.9 miles an hour as per studies published by the transit advocacy group Transportation Alternatives. It generally becomes overcrowded before it even pulls away from its first stops at Main Street in Flushing or at Putnam Avenue in Ridgewood. I have commuted via this bus for my entire life. When you transfer from the subway at Grand Avenue/Newtown, often you are forced to allow multiple buses to pass because of the extreme overcrowding that occurs on this line on a regular basis at all times of day and night. The line can't handle the passengers it has now; imagine adding a thousand students to the situation – all commuting during rush hours. Many times I have walked rather than board the bus and because the bus moves so slowly, I arrived at my stop – which is more than a mile away – before it did.

The second reason for my decision to not support the school has to do with oversaturation. There are already 2 other schools within 4 blocks of this proposed site. IS73 has 1600 students and PS58 has 975 students, all of whom flood Grand Avenue at the same time Monday-Friday. Pedestrians have a hard time navigating through the crowds of kids, and therefore they stay off the streets during this time. This affects commerce in the area negatively.

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In addition, there are school buses double parked in front of PS58 causing a dangerous situation for drivers and pedestrians and blocking emergency vehicles. Adding another 1100 students to this mix is a recipe for disaster.

The School Construction Authority has alternate locations which are more accessible to rapid transit and not in close proximity to other schools. They should choose to site this school at one of those locations. It will be better for both our neighborhoods and our students in the long run.

Yours truly,

*Christina Wilkinson*

Christina Wilkinson

Lifelong resident of Maspeth

Robert E. Doocey  
85-06 60<sup>th</sup> Drive  
Middle Village  
New York, NY 11379-5432

718-507-5686 phone  
718-507-1513 fax  
E-Mail: RobertREDWine40@aol.com

**SUBJECT: PROPOSED HIGH SCHOOL IN MASPETH, ON 74<sup>th</sup> STREET**

Monday, March 30, 2009

Position: **OPPOSED**

As a citizen, and taxpayer, I am opposed to the construction of a high school in this location.

Today you will hear many describe conditions near the proposed location.

I propose that you each visit the vicinity on a school day, at the start and close of school to see firsthand how dangerous this location is.

On 57<sup>th</sup> Ave and 74<sup>th</sup> Street, and again on Grand Avenue and 74<sup>th</sup> Street, there are no crossing guards; yet, traffic there consists of delivery trucks, tractor-trailers, school busses, and many automobiles.

On the 26<sup>th</sup> of March, at school closing, I visited the site and witnessed many fast moving vehicles, driven impatiently by drivers who had no regard for the kids heading home.

It is quite normal for youngsters to engage in horseplay and roughhouse, with the boys showing off to the girls and their friends. Combine impatient drivers, hurrying to get past the kids, with inattentive youngsters, who may be roughhousing or just plain unaware that so many drivers can be dangerous, and instead of building a high school, the city is building a menace to kids.

We read too often of kids severely hurt by trucks or busses whose drivers couldn't see the short kids who may be standing off the curb, invisible to the driver. Build the school in this location, and these horrors will result.

Has DOE consulted with DOT to understand the traffic problem?

When the youngsters are not threatened by vehicles, they will be threatened by the array of cell towers on the STOP&STORE building on the east side of 74<sup>th</sup> Street, across from the proposed school. Who has studied the effect of continuous microwaves on the brains of youngsters all throughout the day. STOP&STORE likely has a contractual agreement with the cell provider that long predates the proposal of a high school in the line of radiation. So, the question will be how will the Department of Education protect future students from long-term exposure to microwaves.

3/30/2009

PAGE 1 of 2

**THIS LOCATION IS DANGEROUS; VOTE NO!**

*OVER*

**Robert E. Doocey**  
85-06 60<sup>th</sup> Drive  
Middle Village  
New York, NY 11379-5432

718-507-5686 phone  
718-507-1513 fax  
E-Mail: RobertREDWine40@aol.com

**What studies has the DOE conducted, and who has the DOE consulted to learn and fully understand the risks involved when young, developing kids are exposed for long periods to microwaves? How will DOE prevent the harm these microwaves produce?**

**For the last 5 or 6 years, at any COP104 Meeting conducted in Maspeth Town Hall on 72<sup>nd</sup> Street, a short distance north of Grand Ave, neighborhood residents complain to police about the various homeless men who seem to live in the shrubbery on the south side 57<sup>th</sup> Avenue just below the Long Island Expressway. The police reply that the only action they are permitted to take is to hospitalize these men for a 72 hour maximum, where after they are free to return to their home to continue harassing the same neighbors in an endless cycle.**

**If adults are frightened by these men, what about the youngsters? Will a youngster bolt into traffic when frightened by the sight or actions of these men?**

**Does the Department of Education know of the problem with these men? What plans do they have to prevent contact between them and the proposed students? Has the Department of Education consulted the Precinct Commander? Has the DOE consulted with the Department of Health and Mental Hygiene regarding the continued presence of these homeless men and dealing with them?**

**Is this committee aware of that problem?**

**The Department of Education has failed entirely to evaluate this selected site. No crossing guards, heavy, fast moving truck, bus, and auto traffic, inattentive horseplaying youngsters, cell tower transmissions, harassment by homeless, and an understaffed 104<sup>th</sup> Precinct. A volatile mix of failure to fully evaluate the location with the intention of protecting the students who would be obliged to attend.**

**The failure of DOE obliges this committee to vote against the proposed school. Use the \$80 Million to save some of the 2000 teachers to be pink-slipped.**

Lorraine Sciulli JPCA PO Box 275 Middle Village NY 11379  
Maspeth High School (1)

Testimony March 31, 2009- Proposed High School 74<sup>th</sup>  
Street and 57<sup>th</sup> Avenue Maspeth, Queens -  
The City Council Subcommittee on Landmarks, Public Siting  
and Maritime Use at 11am

Lorraine Sciulli, First Vice President  
JPCA, PO Box 275, Middle Village, NY 11379  
1.917.287.3815

My name is Lorraine Sciulli and I'm the First Vice President of the JPCA and a member of Queens CB5. I'm here to testify against the building of the school at 74<sup>th</sup> Street and 57<sup>th</sup> Avenue in Maspeth for a number of reasons. Let me state clearly, we know we need to educate our children, it's the choice of school sites that is wreaking havoc on local, once quiet neighborhoods like Maspeth.

First and foremost, this proposed high school would be the third school built within a three or four block area of Maspeth. That would put roughly 4,000 students and faculty on the local streets at arrival and dismissal times, and that will have a total negative impact on the residents' quality of life. The commercial strip of Grand Avenue would also take a big hit because when there are 4,000 kids roaming the streets nobody is shopping in the stores. The Maspeth Chamber of Commerce is also against the building of this school for that very reason.

There is no parking accommodation for faculty and older students so drivers will roam the streets looking for parking, inevitably blocking homeowners' driveways and creating traffic jams. We were told by the SCA that they don't factor "parking" into any school plans yet we read recently that Fresh Meadows Councilman James Gennarro of Council District 24 managed to get parking accommodations for a school being built in his District. So much for

# SCA Maspeth High School

Environmental Assessment Form and Supplemental Environmental Studies

**Prepared for:**  
New York City School Construction Authority

**Prepared by:**  
AKRF, Inc.

**February 2009**

State Environmental Quality Review

FULL ENVIRONMENTAL ASSESSMENT FORM

**Purpose:** The full EAF is designed to help applicants and agencies determine, in an orderly manner, whether a project or action may be significant. The question of whether an action may be significant is not always easy to answer. Frequently, there are aspects of a project that are subjective or unmeasurable. It is also understood that those who determine significance may have little or no formal knowledge of the environment or may not be technically expert in environmental analysis. In addition, many who have knowledge in one particular area may not be aware of the broader concerns affecting the question of significance.

The full EAF is intended to provide a method whereby applicants and agencies can be assured that the determination process has been orderly, comprehensive in nature, yet flexible enough to allow introduction of information to fit a project or action.

**Full EAF Components:** The full EAF is comprised of three parts:

- Part 1:** Provides objective data and information about a given project and its site. By identifying basic project data, it assists a reviewer in the analysis that takes place in Parts 2 and 3.
- Part 2:** Focuses on identifying the range of possible impacts that may occur from a project or action. It provides guidance as to whether an impact is likely to be considered small to moderate or whether it is a potentially-large impact. The form also identifies whether an impact can be mitigated or reduced.
- Part 3:** If any impact in Part 2 is identified as potentially-large, then Part 3 is used to evaluate whether or not the impact is actually important.

**DETERMINATION OF SIGNIFICANCE — Type 1 and Unlisted Actions**

Identify the Portions of EAF completed for this project:  Part 1       Part 2       Part 3

Upon review of the information recorded on this EAF (Parts 1 and 2 and 3 if appropriate), and any other supporting information, and considering both the magnitude and importance of each impact, it is reasonably determined by the lead agency that:

- A. The project will not result in any large and important impact(s) and, therefore, is one which will not have a significant impact on the environment, therefore a **negative declaration will be prepared.**
- B. Although the project could have a significant effect on the environment, there will not be a significant effect for this Unlisted Action because the mitigation measures described in PART 3 have been required, therefore a **CONDITIONED negative declaration will be prepared.\***
- C. The project may result in one or more large and important impacts that may have a significant impact on the environment, therefore a **positive declaration will be prepared.**

\* A Conditioned Negative Declaration is only valid for Unlisted Actions.

**Maspeth High School Facility**

Name of Action

**New York City School Construction Authority**

Name of Lead Agency

**Ross J. Holden**

**Vice President and General Counsel**

Print or Type Name of Responsible Officer in Lead Agency

Title of Responsible Officer

Signature of Responsible Officer in Lead Agency

Signature of Preparer (if different from responsible officer)

2/10/09  
Date

**PART I — PROJECT INFORMATION**

Prepared by Project Sponsor

NOTICE: This document is designed to assist in determining whether the action proposed may have a significant effect on the environment. Please complete the entire form, Parts A through E. Answers to these questions will be considered as part of the application for approval and may be subject to further verification and public review. Provide any additional information you believe will be needed to complete Parts 2 and 3.

It is expected that completion of the full EAF will be dependent on information currently available and will not involve new studies, research or investigation. If information requiring such additional work is unavailable, so indicate and specify each instance.

NAME OF ACTION Maspeth High School Facility		
LOCATION OF ACTION (INCLUDE STREET ADDRESS, MUNICIPALITY AND COUNTY) 73-35 57th Avenue and 54-44 74th Street (Block 2803, Lot 1) Maspeth, Queens		
NAME OF APPLICANT/SPONSOR New York City School Construction Authority		BUSINESS TELEPHONE (718) 472-8000
ADDRESS 30-30 Thomson Avenue		
CITY/PO Long Island City	STATE NY	ZIP CODE 11101
NAME OF OWNER (IF DIFFERENT) Lucky Star Elmhurst LLC		BUSINESS TELEPHONE ( )
ADDRESS 5444 74th Street		
CITY/PO Elmhurst	STATE NY	ZIP CODE 11373
DESCRIPTION OF ACTION The applicant seeks to acquire the site and construct an approximately 1,120-seat high school facility on Block 2803, Lot 1 in Maspeth, Queens.		

Please Complete Each Question—Indicate N.A. if not applicable

**A. Site Description**

Physical setting of overall project, both developed and undeveloped areas.

- Present Land Use:  Urban  Industrial  Commercial  Residential (suburban)  Rural (non-farm)  
 Forest  Agriculture  Other \_\_\_\_\_
- Total acreage of project area: 1.93 acres.

	PRESENTLY	AFTER COMPLETION
APPROXIMATE ACREAGE		
Meadow or Brushland (Non-agricultural)	_____ acres	_____ acres
Forested	_____ acres	_____ acres
Agricultural (Includes orchards, cropland, pasture, etc.)	_____ acres	_____ acres
Wetland (Freshwater or tidal as per Articles 24, 25 of ECL)	_____ acres	_____ acres
Water Surface Area	_____ acres	_____ acres
Unvegetated (Rock, earth or fill)	_____ acres	_____ acres
Roads, buildings and other paved surfaces	1.93	1.93
Other (Indicate type) _____	_____ acres	_____ acres
- What is predominant soil type(s) on the project site? Urban
  - Soil drainage:  Well drained 100 % of site  Moderately well drained \_\_\_\_\_ % of site.  
 Poorly drained \_\_\_\_\_ % of site
  - If any agricultural land is involved, how many acres of soil are classified within soil group 1 through 4 of the NYS Land Classification System? \_\_\_\_\_ Acres (see 1NYCRR 370)
- Are there bedrock outcroppings on project site?  Yes  No  
What is the depth to bedrock? (in feet) Greater than 100 feet
- Approximate percentage of proposed project site with slopes:  0-10% 100 %  10-15% \_\_\_\_\_ %  
 15% or greater \_\_\_\_\_ %
- Is project substantially contiguous to, or contain a building, site, or district, listed on the State or National Registers of Historic Places?  Yes  No
- Is project substantially contiguous to a site listed on the Register of National Natural Landmarks?  Yes  No
- What is the depth of the water table? Approx. 30 (in feet)



9. Is site located over a primary, principal, or sole source aquifer?  Yes  No
10. Do hunting, fishing or shell fishing opportunities presently exist in the project area?  Yes  No
11. Does project site contain any species of plant or animal life that is identified as threatened or endangered?  Yes  No

According to: \_\_\_\_\_

Identify each species: \_\_\_\_\_

12. Are there any unique or unusual land forms on the project site? (i.e., cliffs, dunes or other geological formations?)  Yes  No

Describe: \_\_\_\_\_

13. Is the project site presently used by the community or neighborhood as an open space or recreation area?  Yes  No

If yes, explain: \_\_\_\_\_

14. Does the present site include scenic views known to be important to the community?  Yes  No

15. Streams within or contiguous to project area? None.

a. Name of Stream and name of River to which it is tributary: \_\_\_\_\_

16. Lakes, ponds, wetland areas within or contiguous to project area: None.

a. Name: \_\_\_\_\_

b. Size (in acres): \_\_\_\_\_

17. Is the site served by existing public utilities?  Yes  No

a. If YES, does sufficient capacity exist to allow connection?  Yes  No

b. If YES, will improvements be necessary to allow connection?  Yes  No

18. Is the site located in an agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304?  Yes  No

19. Is the site located in or substantially contiguous to a Critical Environmental Area designated pursuant to Article 8 of the ECL, and 6 NYCRR 617?  Yes  No

20. Has the site ever been used for the disposal of solid or hazardous waste?  Yes  No

## B. Project Description

1. Physical dimensions and scale of project (fill in dimensions as appropriate).

a. Total contiguous acreage owned or controlled by project sponsor 0 acres.

b. Project acreage to be developed: 1.93 acres initially; 1.93 acres ultimately.

c. Project acreage to remain undeveloped 0 acres.

d. Length of project, in miles: N/A (if appropriate)

e. If the project is an expansion, indicate percent of expansion proposed 0 %

f. Number of off-street parking spaces existing 0 ; proposed 0

g. Maximum vehicular trips generated per hour 336 (upon completion of project)?

h. If residential: Number and type of housing units? N/A

	One Family	Two Family	Multiple Family	Condominium
Initially	_____	_____	_____	_____
Ultimately	_____	_____	_____	_____

i. Dimensions (in feet) of largest proposed structure Approx. 60' height; Approx. 219' width; Approx. 360' length.

j. Linear feet of frontage along a public thoroughfare project will occupy is? 360' on 74th St and 219' on 57th Ave ft.

2. How much natural material (i.e., rock, earth, etc.) will be removed from the site? TBD tons/cubic yards.

3. Will disturbed areas be reclaimed?  N/A  Yes  No
- a. If yes, for what intended purpose is the site being reclaimed? \_\_\_\_\_
- b. Will topsoil be stockpiled for reclamation?  Yes  No
- c. Will upper subsoil be stockpiled for reclamation?  Yes  No
4. How many acres of vegetation (trees, shrubs, ground covers) will be removed from site? \_\_\_\_\_ 0 \_\_\_\_\_ acres.
5. Will any mature forest (over 100 years old) or other locally-important vegetation be removed by this project?  Yes  No
6. If single phase project: Anticipated period of construction \_\_\_\_\_ 36 \_\_\_\_\_ months, (including demolition)
7. If multi-phased: N/A
- a. Total number of phases anticipated \_\_\_\_\_ (number)
- b. Anticipated date of commencement phase 1 \_\_\_\_\_ month \_\_\_\_\_ year, including (demolition)
- c. Approximate completion date of final phase \_\_\_\_\_ month \_\_\_\_\_ year.
- d. Is phase 1 functionally dependent of subsequent phases?  Yes  No
8. Will blasting occur during construction?  Yes  No
9. Number of jobs generated: during construction TBD ; after project is complete Approx. 85
10. Number of jobs eliminated by this project 0
11. Will project require relocation of any projects or facilities?  Yes  No
- If yes, explain: \_\_\_\_\_
- 
12. Is surface liquid waste disposal involved?  Yes  No
- a. If yes, indicate type of waste (sewage, industrial, etc) and amount sewage; 33,600 gallons per day<sup>1</sup>
- b. Name of water body into which effluent will be discharged \_\_\_\_\_
13. Is subsurface liquid waste disposal involved? Type \_\_\_\_\_  Yes  No
14. Will surface area of an existing water body increase or decrease by proposal?  Yes  No
- If yes, explain: \_\_\_\_\_
15. Is project or any portion of project located in a 100 year flood plain?  Yes  No
16. Will the project generate solid waste?  Yes  No
- a. If yes, what is the amount per month? 4.5<sup>2</sup> tons
- b. If yes, will an existing solid waste facility be used?  Yes  No
- c. If yes, give name TBD ; location All waste is collected and sent to a designated disposal facility by the Department of Sanitation
- d. Will any wastes not go into a sewage disposal system or into a sanitary landfill?  Yes  No
- e. If yes, explain: Recyclable materials collected at schools would be taken to a recycling facility for processing.
17. Will the project involve the disposal of solid waste?  Yes  No
- a. If yes, what is the anticipated rate of disposal? \_\_\_\_\_ tons/month
- b. If yes, what is the anticipated site life? \_\_\_\_\_ years
18. Will project use herbicides or pesticides?  Yes  No
19. Will project routinely produce odors (more than one hour per day)?  Yes  No
20. Will project produce operating noise exceeding the local ambient noise levels?  Yes  No
21. Will project result in an increase in energy use?  Yes  No
- If yes, indicate type(s): Electric and Photovoltaics
- 
22. If water supply is from wells, indicate pumping capacity N/A gallons/minute

<sup>1</sup> 1,120 students x 30 gallons per day (gpd) = 33,600 gallons.

<sup>2</sup> 1,120 students x 2 pounds per week (ppw) = 2,240 x 4 weeks = 8,960 pounds.

23. Total anticipated water usage per day 48,428<sup>1</sup> gallons/day

24. Does project involve Local, State, or Federal funding?  Yes  No

If yes, explain: Construction costs will be funded by the New York City Department of Education's Five Year Capital Plan for Fiscal Years 2005-2009.

25. Approvals Required:

			Type	Submittal Date
City, Town, Village Board	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	_____	_____
City, Town, Village Planning Board	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	_____	_____
City, Town, Village Zoning Board	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	_____	_____
City, County Health Department	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	_____	_____
Other Local Agencies	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	_____	_____
Other Regional Agencies	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	_____	_____
State Agencies	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	_____	_____
Federal Agencies	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	_____	_____

### C. Zoning and Planning Information

1. Does proposed action involve a planning or zoning decision?  Yes  No

If Yes, indicate decision required:

- Zoning amendment    Zoning variance    New/revision of master plan    Subdivision  
 Site plan    Special use permit    Resource management plan    Other   Project would require a zoning override from the Deputy Mayor for Education and Community Development.

2. What is the zoning classification(s) of the site? M1-1

3. What is the maximum potential development of the site if developed as permitted by the present zoning?  
84,000 sf x 2.4 FAR = 201,600 sf

4. What is the proposed zoning of the site? No change to the existing zoning is proposed.

5. What is the maximum potential development of the site if developed as permitted by the proposed zoning?  
N/A

6. Is the proposed action consistent with the recommended uses in adopted local land use plans?  Yes  No

7. What are the predominant land use(s) and zoning classifications within a ¼-mile radius of proposed action?  
M1-1, M3-1, R4, R4B, R4-1, R5, R6B

8. Is the proposed action compatible with adjoining/surrounding land uses with a ¼ mile?  Yes  No

9. If the proposed action is the subdivision of land, how many lots are proposed? N/A

a. What is the minimum lot size proposed? \_\_\_\_\_

10. Will the proposed action require authorization(s) for the formation of sewer or water districts?  Yes  No

11. Will the proposed action create a demand for any community provided services (recreation, education, police, fire protection)?  Yes  No

a. If yes, is existing capacity sufficient to handle projected demand?  Yes  No

12. Will the proposed action result in the generation of traffic significantly above present levels?  Yes  No

a. If yes, is the existing road network adequate to handle the additional traffic?  Yes  No

<sup>1</sup> 1,120 students x 30 gpd = 33,600 + (0.10 x 148,280 gsf) = 48,428 gallons

### D. Informational Details

Attach any additional information as may be needed to clarify your project. If there are or may be an adverse impacts associated with your proposal, please discuss such impacts and the measures which you proposed to mitigate or avoid them.

### E. Verification

I certify that the information provided above is true to the best of my knowledge.

Applicant/Sponsor Name Alicia Wolff, AICP Date 2/10/09

Signature  Title Senior Planner, AKRF

If the action is in the Coastal Area, and you are a state agency, complete the Coastal Assessment Form before proceeding with this assessment.

**Part 2 - PROJECT IMPACTS AND THEIR MAGNITUDE**  
**Responsibility of Lead Agency**

**General Information (Read Carefully)**

In completing the form the reviewer should be guided by the question: Have my responses and determinations been *reasonable*? The reviewer is not expected to be an expert environmental analyst. The **Examples** provided are to assist the reviewer by showing types of impacts and wherever possible the threshold of magnitude that would trigger a response in column 2. The examples are generally applicable throughout the State and for most situations. But, for any specific project or site other examples and/or lower thresholds may be appropriate for a Potential Large Impact response, thus requiring evaluation in Part 3. The impacts of each project, on each site, in each locality, will vary. Therefore, the examples are illustrative and have been offered as guidance. They do not constitute an exhaustive list of impacts and thresholds to answer each question. The number of examples per question does not indicate the importance of each question. In identifying impacts, consider long term, short term and cumulative effects.

**Instructions (Read Carefully)**

- a. Answer each of the 20 questions in PART 2. Answer **Yes** if there will be any impact.
- b. **Maybe** answers should be considered as **Yes** answers.
- c. If answering **Yes** to a question, then check the appropriate box (column 1 or 2) to indicate the potential size of the impact. If impact threshold equals or exceeds any example provided, check column 2. If impact will occur but threshold is lower than example, check column 1.
- d. Identifying that an Impact will be potentially large (column 2) does not mean that it is also necessarily **significant**. Any large impact must be evaluated in PART 3 to determine significance. Identifying an impact in column 2 simply asks that it be looked at further.
- e. If a reviewer has doubt about size of the impact then consider the impact as potentially large and proceed to PART 3.
- f. If a potentially large impact checked in column 2 can be mitigated by change(s) in the project to a small to moderate impact, also check the **Yes** box in column 3. A **No** response indicates that such a reduction is not possible. This must be explained in PART 3.

**IMPACT ON LAND**

1. Will the Proposed Action result in a physical change to the project site?  NO  YES

See Chapter 2, "Land Use, Zoning, and Community Character."

**Examples** that would apply to column 2

Any construction on slopes of 15% or greater, (15 foot rise per 100 foot of length), or where the general slopes in the project area exceed 10%.

Construction on land where the depth to the water table is less than 3 feet.

Construction of paved parking area for 1,000 or more vehicles.

Construction on land where bedrock is exposed or generally within 3 feet of existing ground surface.

Construction that will continue for more than 1 year or involve more than one phase or stage.

Excavation for mining purposes that would remove more than 1,000 tons of natural material (i.e., rock or soil) per year.

Construction or expansion of a sanitary landfill.

Construction in a designated floodway.

Other impacts

2. Will there be an effect to any unique or unusual land forms found on the site? (i.e., cliffs, dunes, geological)  NO  YES

Other impacts

	1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact be Mitigated by Project Change
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO

**IMPACT ON WATER**

3. Will Proposed Action affect any water body designated? (Under Articles 15, 24, 25 of the Environmental Conservation Law, ECL) <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact be Mitigated by Project Change
<b>Examples</b> that would apply to column 2			
Developable area of site contains a protected water body.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Dredging more than 100 cubic yards of material from channel of a protected stream.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Extension of utility distribution facilities through a protected water body.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Construction in a designated freshwater or tidal wetland.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Other impacts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>4. Will Proposed Action affect any non-protected existing or new body of water?</b> <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES			
<b>Examples</b> that would apply to column 2			
A 10% increase or decrease in the surface area of any body of water or more than a 10-acre increase or decrease.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Construction of a body of water that exceeds 10 acres of surface area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Other impacts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>5. Will Proposed Action affect surface or ground water quality or quantity?</b> <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES			
<b>Examples</b> that would apply to column 2			
Proposed Action will require a discharge permit.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Proposed Action requires use of a source of water that does not have approval to serve proposed (project) action.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Proposed Action requires water supply from wells with greater than 45 gallons per minute pumping capacity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Construction or operation causing any contamination of a water supply system.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Proposed Action will adversely affect groundwater.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Liquid effluent will be conveyed off the site to facilities which presently do not exist or have inadequate capacity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Proposed Action would use water in excess of 20,000 gallons per day.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Proposed Action will likely cause siltation or other discharge into an existing body of water to the extent that there will be an obvious visual contrast to natural conditions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Proposed Action will require the storage of petroleum or chemical products greater than 1,100 gallons.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Proposed Action will allow residential uses in areas without water and/or sewer services.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Proposed Action locates commercial and/or industrial uses which may require new or expansion of existing waste treatment and/or storage facilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Other impacts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO



<b>IMPACT ON AESTHETIC RESOURCES</b>			
	1 Small to Moderate Impact	2 Potential Large Impact	3 Can Impact be Mitigated by Project Change
<b>11. Will Proposed Action affect aesthetic resources? (If necessary, use the Visual EAR Addendum Section 617.20, Appendix B.)</b> <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES			
<b>Examples</b> that would apply to column 2 Proposed land uses, or project components obviously different from or in sharp contrast to current surrounding land use patterns, whether man-made or natural.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Proposed land uses, project components visible to users of aesthetic resources which will eliminate or significantly reduce their enjoyment of the aesthetic qualities of that resource.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Project components that will result in the elimination or significant screening of scenic views known to be important to the area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Other impacts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>IMPACT ON HISTORIC AND ARCHEOLOGICAL RESOURCES</b>			
<b>12. Will Proposed Action impact any site or structure of historic, prehistoric or paleontological importance?</b> <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES			
<b>Examples</b> that would apply to column 2 Proposed Action occurring wholly or partially within or substantially contiguous to any facility or site listed on the State or National Register of Historic places.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Any impact to an archeological site or fossil bed located within the project site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Proposed Action will occur in an area designated as sensitive for archeological sites on the NYS Site Inventory.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Other impacts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>IMPACT ON OPEN SPACE AND RECREATION</b>			
<b>Will Proposed Action affect the quantity or quality of existing or future open spaces or recreational opportunities?</b> <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES			
<b>Examples</b> that would apply to column 2 The permanent foreclosure of a future recreational opportunity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
A major reduction of an open space important to the community.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
Other impacts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO



**IMPACT ON CRITICAL ENVIRONMENTAL AREAS**

14. Will Proposed Action impact the exceptional or unique characteristics of a critical environmental area (CEA) established pursuant to subdivision 6NYCRR 617.14(g)?  NO  YES

List the environmental characteristics that caused the designation of the CEA

**Examples** that would apply to column 2

Proposed Action to locate within the CEA?

Proposed Action will result in a reduction in the quantity of the resource?

Proposed Action will result in a reduction in the quality of the resource?

Proposed Action will impact the use, function or enjoyment of the resource?

Other impacts

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO

**IMPACT ON TRANSPORTATION**

15. Will there be an effect to existing transportation systems?  NO  YES

**Examples** that would apply to column 2

Alteration of present patterns of movement of people and/or goods.

Proposed Action would result in major traffic problems.

Other impacts **See Chapter 5, "Traffic and Parking."**

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO

**IMPACT ON ENERGY**

Will Proposed Action affect the community's sources of fuel or energy supply?  NO  YES

**Examples** that would apply to column 2

Proposed Action will cause a greater than 5% increase in the use of any form of energy in the municipality.

Proposed Action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two family residences or to serve a major commercial or industrial use.

Other impacts

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO

**NOISE AND ODOR IMPACT**

17. Will there be objectionable odors, noise, or vibration as a result of the Proposed Action?  NO  YES

**See Chapter 8, "Noise."**

**Examples** that would apply to column 2

Blasting within 1,500 feet of a hospital, school or other sensitive facility.

Odors will occur routinely (more than one hour per day).

Proposed Action will produce operating noise exceeding the local ambient noise levels for noise outside of structures.

Proposed Action will remove natural barriers that would act as a noise screen.

Other impacts

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES <input type="checkbox"/> NO

**IMPACT ON PUBLIC HEALTH**

18. Will Proposed Action affect public health and safety?  NO  YES

**Examples** that would apply to column 2

Proposed Action may cause a risk of explosion or release of hazardous substances (i.e. oil, pesticides, chemicals, radiation, etc.) in the event of accident or upset conditions, or there may be a chronic low level discharge or emission.

Proposed Action may result in the burial of "hazardous wastes" in any form (i.e. toxic, poisonous, highly reactive, radioactive, irritating, infectious, etc.)

Storage facilities for one million or more gallons of liquefied natural gas or other flammable liquids.

Proposed Action may result in the excavation or other disturbance within 2,000 feet of a site used for the disposal of solid or hazardous waste.

YES  NO  
 YES  NO  
 YES  NO  
 YES  NO

Other impacts \_\_\_\_\_

**IMPACT ON GROWTH AND CHARACTER OF COMMUNITY OR NEIGHBORHOOD**

19. Will Proposed Action affect the character of the existing community?  NO  YES

**Examples** that would apply to column 2

The permanent population of the city, town or village in which the project is located is likely to grow by more than 5%.

The municipal budget for capital expenditures or operating services will increase by more than 5% per year as a result of this project.

Proposed Action will conflict with officially adopted plans or goals.

Proposed Action will cause a change in the density of land use.

Proposed Action will replace or eliminate existing facilities, structures or areas of historic importance to the community.

Development will create a demand for additional community services (e.g. schools, police and fire, etc.)

Proposed Action will set an important precedent for future projects.

Proposed Action will create or eliminate employment.

YES  NO  
 YES  NO  
 YES  NO  
 YES  NO  
 YES  NO  
 YES  NO  
 YES  NO  
 YES  NO

Other impacts \_\_\_\_\_

20 Is there, or is there likely to be, public controversy related to potential adverse environmental impacts?

NO  YES

**If Any Action in Part 2 is Identified as a Potential Large Impact or If you Cannot Determine the Magnitude of Impact, Proceed to Part 3**

## Executive Summary

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### A. INTRODUCTION

The New York City School Construction Authority (SCA) proposes to construct a new, approximately 1,120-seat high school facility in the Maspeth section of Queens. The proposed school would contain facilities for two high school organizations for students in grades 9 through 12, as well as facilities to serve District 75 (special education) students. The school facility is expected primarily to serve residents of the New York City Department of Education's (DOE) District 24, but could also serve high school students from beyond the district. The project site is located on Block 2803, Lot 1, with frontages on 74th Street to the east and 57th Avenue to the south. The site is currently occupied with a vacant one-story industrial building and accessory surface parking lot.

According to current project plans, it is expected that the proposed school facility would contain approximately 148,280 square feet (sf), and would contain classrooms, administrative offices, library, cafeteria, kitchen, gymnasium, auditorium, computer/technical labs, medical suite, storage facilities, locker rooms, and custodial spaces. A large outdoor recreational area would be located behind the school structure and would include a walking track, fitness equipment, trees and plantings. The main entrance to the school facility would be located on 74th Street.

The proposed school would be located in an M1-1 zoning district, in which schools are permitted by Special Permit of the Board of Standards and Appeals (BSA). Instead of a Special Permit, the SCA would seek a zoning use and bulk override from the Deputy Mayor for Education and Community Development. Funding for design and construction of this project is available in the DOE's Amended Capital Plan for Fiscal Years 2005 to 2009.

For the purpose of this environmental review, it was assumed that student occupancy of the school would not begin until September 2012. Accordingly, 2012 has been selected as the Build year for which the environmental assessment areas have been analyzed.

### B. PROBABLE IMPACTS OF THE PROPOSED PROJECT

#### LAND USE

##### *PROJECT SITE*

The proposed project would replace the vacant industrial building currently located on the project site with a new school facility that would house two separate high school organizations. The proposed facility is expected to primarily serve students from District 24, although it could also serve high school students citywide.

The proposed school facility is an L-shaped, four-story building containing approximately 148,280 sf of floor area. The proposed school would have frontages along 74th Street and 57th Avenue, with the main entrance located on 74th Street. A large outdoor recreational space would

## **Maspeth High School**

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be located behind the school structure, and would be screened from adjacent buildings by a retaining wall and fencing. Therefore, as per *New York City Environmental Quality Review (CEQR) Technical Manual* guidelines, the proposed school facility would be compatible with surrounding building heights and uses, and would improve conditions on the site by replacing a vacant building with a new community facility use.

### **STUDY AREA**

The proposed school facility would improve the study area by demolishing a vacant former industrial building and constructing a new community facility use on the site. The proposed use of the project site for a new school facility would be compatible with the uses currently found in the study area, including the residential, commercial, and community facility uses. The project site is also adjacent to some industrial uses, including light manufacturing, warehousing, and auto related uses. The new school facility would have site-specific buffering to separate it from the existing industrial uses, including fencing and landscaped buffers along the perimeters. Therefore, the development of the proposed school facility is not expected to affect adjacent land uses, such as the automotive service facilities located along Grand Avenue or surrounding residential, commercial, or industrial uses.

### **ZONING AND PUBLIC POLICY**

The proposed project would replace an industrial use with a community facility that is allowed in M1-1 zoning districts by Special Permit from the BSA pursuant to Section 42-31 of the New York City Zoning Resolution. Instead of a Special Permit, the SCA would seek approval of a zoning use and bulk override from the Deputy Mayor for Education and Community Development to permit the project to proceed. While the floor area of the proposed project would comply with existing floor area requirements, zoning bulk overrides may be required for rear yard, street wall setback, sky exposure plane, and rear yard obstruction requirements.

If the zoning overrides are granted, they would apply only to the project site and would have no impact on neighboring zoning or property. Therefore, the proposed project would have no significant adverse impacts to local zoning.

### **COMMUNITY CHARACTER**

In the future with the proposed project, the vacant industrial building on the site would be replaced with a new school facility that would be similar in scale to existing buildings and compatible with surrounding residential, industrial, commercial, and community facility uses. The increase in traffic volumes with the proposed project is not expected to result in any significant adverse impacts to the character of the community.

### **COMMUNITY FACILITIES**

The new high school facility would provide additional community resources for area residents, and is expected to relieve overcrowding in nearby high schools. The Police and Fire Departments frequently monitor conditions to determine how their personnel are deployed. Decisions to alter existing deployment patterns would be made only in response to a demonstrated change in demand. Police and fire services would be adjusted as deemed necessary by both agencies, and no significant adverse impacts to police or fire services are expected to result from the proposed project.

## **HISTORIC RESOURCES**

### *ARCHAEOLOGICAL RESOURCES*

As the project site has been determined to have a low-to-moderate sensitivity for precontact period resources and to be not sensitive for historic period resources, it is not anticipated that the proposed project would adversely impact archaeological resources.

### *ARCHITECTURAL RESOURCES*

There are no known or potential architectural resources on the project site or in the study area. Therefore, the proposed project would not have any adverse physical, visual, or contextual impacts on-site architectural resources.

## **URBAN DESIGN AND VISUAL RESOURCES**

### *PROJECT SITE*

The proposed project would replace a vacant, one-story industrial building with a new, actively used high school facility. To reflect the mixed residential and industrial character of the surrounding area the building would be clad in a variety of materials, mostly light-colored brick. Further, the different elevations of the building would break up the massing of the new school building. There would also be a large, interior courtyard on the northwest corner of the project site, and a new curb cut and concrete driveway would be placed on 57th Avenue to allow for vehicle ingress and egress to the interior loading areas. Several other curb cuts along 74th Street would be removed and new sidewalks would be constructed along 74th Street and 57th Avenue. The perimeter of the project site would also be landscaped with new street trees.

Since there are no visual resources on the project site or significant view corridors from the project site, the proposed project would not block views of any resources or any significant view corridors. The proposed project would not result in any significant adverse impacts on urban design or visual resources on the project site.

### *STUDY AREA*

The new school would be constructed on an existing block and would not alter the street patterns in the study area. The proposed school would be in keeping with the structures found in the study area, including the existing P.S. 58 School of Heroes building and the residential buildings. While it would be taller than the existing building on the project site and the immediately surrounding buildings, it would not be significantly taller than the surrounding buildings. Further, it would be comparable in scale and bulk to the existing P.S. School of Heroes building located one block to the west of the project site. The majority of the building would be set back behind either a one-story or two-story section, thereby creating nearly continuous streetwalls along both 57th Avenue and 74th Street. The new landscaping, including the new plaza and the main entrance, would improve the appearance of the project site and the surrounding area.

Overall, the proposed project would improve the appearance of the project site and surrounding area by replacing the vacant and underutilized building with a new, compatible use. The site would be surrounded by new trees which would create a buffer between the outside play areas and adjacent buildings and would improve the appearance of the project site. It would be built on

an existing block and would not block any significant views. No significant adverse impacts to the urban design and visual resources of the study area are anticipated as a result of the proposed project.

## TRAFFIC AND PARKING

### TRAFFIC

Traffic impacts (for both signalized and unsignalized intersections) are considered significant and require examination of improvements if they result in an increase of 5 or more seconds of delay in a lane group over No Build levels beyond mid-Level of Service (LOS) D. For No Build LOS E, a 4-second increase in delay is considered significant. For No Build LOS F, a 3-second increase in delay is considered significant. Also, if the No Build LOS F condition already has a No Build delay in excess of 120 seconds, an increase of 1.0 or more seconds of delay is considered significant, unless the proposed project generates fewer than five vehicle trips through that intersection in the peak hour. Impacts are also considered significant if levels of service decrease from acceptable LOS A, B, or C in the No Build condition to marginally unacceptable LOS D, or unacceptable LOS E or F in the future Build condition. In the event of such impacts, potential improvement measures will be examined.

In addition, the *CEQR Technical Manual* states that at an unsignalized intersection, for the minor approach to trigger significant impacts, 90 passenger car equivalents (PCEs) must be identified in the future build condition in any peak hour. The street capacities at the majority of the study area intersections would be sufficient to accommodate the project-generated traffic increases. However, based on CEQR standards, the proposed project could result in significant adverse impacts at the following intersections/approaches during the peak periods analyzed:

- Grand Avenue and 69th Street—at the southbound approach during the AM and PM peak hours;
- Grand Avenue and 72nd Place—at the northbound left-turn movement during the PM peak hour;
- Grand Avenue and 74th Street (Shopping Center Driveway)—at the eastbound and northbound approaches during the AM and PM peak hours;
- 57th Avenue and 74th Street—at the westbound approach during the AM, and the southbound approach during the PM peak hours; and
- Grand Avenue and 74th Street—at the southbound approach during the AM and PM peak hours (unsignalized intersection).

### PARKING

The proposed school would not provide any on-site parking spaces, and would generate a demand for approximately 90 parking spaces by faculty/staff and students commuting by auto. Since the study area's on-street parking utilization in the No Build conditions is approximately 61 percent, there would be enough capacity available to accommodate the project-generated parking demand. With the project-generated parking demand, the on-street parking utilization rate in the study area would increase to approximately 69 percent in the 2012 Build condition. Therefore, the proposed project would not result in significant adverse impact to the supply-and-demand of on-street parking in the study area.

## MITIGATION

A number of study area intersections would experience significant adverse traffic impacts as a result of project-generated traffic. With the following measures in place, all of the impacted intersection approaches/lane groups would operate at the same or at better service conditions than the No Build conditions. The specific improvement measures for each intersection approach/lane group are as follows:

### *GRAND AVENUE AND 69TH STREET*

The impact at the southbound approach during the AM and PM peak hours could be mitigated by shifting 3 seconds of green time from the eastbound/westbound phase to the northbound/southbound phase.

### *GRAND AVENUE AND 72ND PLACE*

The impact at the northbound left turn movement during the PM peak hour could be mitigated by shifting 1 second of green time from the eastbound/westbound phase to the northbound/southbound phase.

### *GRAND AVENUE AND 74TH STREET (SIGNALIZED):*

Parking is currently permitted on the south curb of the eastbound approach on Grand Avenue and on the east curb of the northbound approach on 74th Street. The impacts at the eastbound and northbound approaches during the AM and PM peak hours could be mitigated by prohibiting parking on these approaches for approximately 150 feet and restriping both approaches as follows:

- Restripe the eastbound approach to provide one left-through and one right turn lane, each 12 feet wide.
- Restripe the northbound approach to provide one 12-foot left-through lane and one 12-foot right turn lane.

In addition, mitigation would include shifting 3 seconds of green time from the eastbound/westbound phase to the northbound/southbound phase during the AM peak hour.

### *57TH AVENUE AND 74TH STREET:*

The impact at the westbound approach during the AM peak hour could be mitigated by prohibiting parking for 150 feet along the north curb and moving the centerline 2 feet south to create a 13½ foot-wide shared left, through and right-turn lane, and by shifting one second of green time from the northbound/southbound phase to the eastbound/westbound phase. The impact at the southbound approach during the PM peak period could be mitigated by implementing the measures identified for the AM peak hour, and by shifting 2 seconds green time from the eastbound/westbound phase to the northbound/southbound phase.

All of the improvement measures discussed above are subject to review and approval by NYCDOT.

### *GRAND AVENUE AND 74TH STREET (UNSIGNALIZED):*

The impact at the southbound approach during the AM and PM peak hours could be mitigated by installing a traffic new signal.

It should be noted that the measures identified above would result in displacement of approximately 25 on-street parking spaces at intersection approaches where parking restrictions are recommended as mitigation. The displaced parking spaces would increase the overall on-street parking utilization in the study area to approximately 71 percent during the morning period.

## TRANSIT

The estimated trips generated by the proposed project would not exceed impact thresholds for transit station operations, subway, or bus line-haul; therefore there would be no significant adverse impacts to these transit elements as a result of the proposed project.

## PEDESTRIAN SAFETY

The *CEQR Technical Manual* considers a location to be a high-pedestrian-accident location if it has 5 or more pedestrian accidents in any 12 months within the most recent three-year period. Data on traffic accidents at the study area intersections were compiled from New York State Department of Transportation (NYSDOT) records for the period of January 2005 through December 2007. Based on this information, none of the intersections in the study area are high vehicle/pedestrian accident locations.

Project-related impacts to corners and crosswalks are considered significant if the proposed project would result in a deterioration in level-of-service from No Build mid-LOS D or better to Build LOS E or F, or when the available circulation space is decreased by 1 SFP or more at a location with a No Build operation of mid-LOS D or worse. Project-related sidewalk impacts are considered significant and require examination of mitigation if there is an increase of 2 PFM over No Build conditions that are characterized by flow rates greater than 15 PFM (LOS D). Based on these criteria, the proposed project would not result in any significant adverse pedestrian impacts during the AM and PM peak periods.

## AIR QUALITY

### *MOBILE SOURCE ANALYSIS*

One intersection—at 57th Avenue at 74th Street—was selected for analysis. This intersection was selected because it is the location in the study area where the largest levels of project-generated traffic would be expected at a signalized intersection, and due to the overall poor levels of service in the Build condition. The analysis results indicated that the proposed project would not result in any violations of the carbon monoxide (CO) standard or any significant impacts at the receptor location. Therefore, the proposed project would not result in any significant adverse CO air quality impacts.

### *HEATING VENTILATION AND AIR CONDITIONING (HVAC) SOURCE ANALYSIS*

The primary stationary source of air pollutants associated with the proposed school would be emissions from the combustion of natural gas by HVAC equipment. The nearest distance to a building of a similar or greater height was determined to be beyond 400 feet; therefore, this distance was chosen for the analysis in accordance with the *CEQR Technical Manual*. At this distance, the proposed project would not result in any significant stationary source air quality impacts since the proposed project would be below the maximum permitted development size as per the *CEQR Technical Manual* guidelines. Therefore, the proposed project would not result in any potential adverse air quality impacts from HVAC emission sources.



### *INDUSTRIAL SOURCE ANALYSIS*

A study was conducted to identify manufacturing and industrial uses within 400 feet of the proposed school, and one business was identified that could potentially have significant impacts on the proposed school. Therefore, refined dispersion modeling was performed for the pollutant emitted by this source. The maximum predicted annual concentration of tetrachloroethylene from dry cleaner establishments exceeds the New York State Department of Environmental Conservation (NYSDEC) annual guideline concentrations (AGC). However, since the predicted tetrachloroethylene impact is less than 10 times the annual threshold concentration, it is not considered to be significant. Therefore, based on the data available on the surrounding industrial uses, the proposed school would not experience significant air quality impacts from these facilities.

### *CHEMICAL SPILL ANALYSIS*

A spill in the proposed school's fume hood exhaust system would produce a maximum concentration at the nearest intake location that would be below the corresponding guidelines set by the U.S. Occupational Safety and Health Administration (OSHA) and/or the National Institute for Occupational Safety and Health (NIOSH). Such a spill would also not be expected to result in significant dispersion levels outside of the school. Therefore, there would be no significant impact on air quality from potential spills in the school laboratory hoods.

### **NOISE**

The increases in noise level would all be less than 2.5 dB in magnitude, which would be barely perceptible and insignificant according to CEQR criteria. Therefore it can be concluded that the playground would have no significant impact on ambient noise levels in the area.

The school building design would include the use of well-sealed, double-glazed windows, and central air conditioning (i.e., alternate means of ventilation). With these measures, the window/wall attenuation would provide more than 30 dBA for all façades of the building. Based upon the noise levels measured at the project site, these design measures would provide sufficient noise attenuation to achieve the CEQR requirements, which call for interior noise levels of 45 dBA or lower.

In addition, the building mechanical system (i.e., heating, ventilation, and air conditioning systems) would be designed to meet all applicable noise regulations and to avoid producing noise levels that would result in any significant increase in ambient levels.

### **SOIL AND GROUNDWATER**

A Phase I Environmental Site Assessment (ESA) was prepared on behalf of SCA in March 2008. The Phase I ESA identified recognized environmental conditions (RECs) associated with the historic presence of nearby automobile service stations, dry cleaners, a salvage yard, manufacturing facilities, and a former gas manufacturing facility.

Based on the Phase I ESA, further study in the form of a Phase II Environmental Site Investigation (ESI) was completed in March 2008. The Phase II ESI identified elevated concentrations of petroleum-related volatile organic compounds (VOCs) and tetrachloroethene (PCE) are present in soil vapor and elevated concentrations of semi-volatile organic compounds (SVOCs) and metals are present in the soil. Therefore, certain measures—including proper management of excavated soils and appropriate health and safety measures—would be

## Maspeth High School

implemented during project construction. Further, certain design measures would be incorporated into the plans for the proposed building to prevent potential migration of organic vapors. Finally, for areas of the site where exposed soils may exist (i.e., landscaped areas), a 24-inch thick layer of environmentally clean fill would be placed over the soils.

With these measures in place, no significant adverse impacts due to the presence of hazardous and petroleum-contaminated materials would be expected to occur either during or following construction at the site. \*

**A. INTRODUCTION**

The New York City School Construction Authority (SCA) proposes to construct a new, approximately 1,120-seat high school facility in the Maspeth section of Queens (see Figure 1-1). The proposed school would contain facilities for two high school organizations for students in grades 9 through 12, as well as facilities to serve District 75 (special education) students. The school facility is expected primarily to serve residents of the New York City Department of Education's (DOE) District 24, but could also serve high school students from beyond the district. The project site is located on Block 2803, Lot 1, with frontages on 74th Street to the east and 57th Avenue to the south (see Figure 1-2). The site is currently occupied with a vacant one-story industrial building and accessory surface parking lot.

According to current project plans, it is expected that the proposed school facility would contain approximately 148,280 square feet (sf), and would contain classrooms, administrative offices, library, cafeteria, kitchen, gymnasium, auditorium, computer/technical labs, medical suite, storage facilities, locker rooms, and custodial spaces. A large outdoor recreational area would be located behind the school structure and would include a walking track, fitness equipment, trees and plantings. The main entrance to the school facility would be located on 74th Street (see Figures 1-3 and 1-4).

The proposed school would be located in an M1-1 zoning district, in which schools are permitted by Special Permit of the Board of Standards and Appeals. Therefore, the SCA would seek a zoning use override from the Deputy Mayor for Education and Community Development. Funding for design and construction of this project is available in the DOE's Amended Capital Plan for Fiscal Years 2005 to 2009.

For the purpose of this environmental review, it was assumed that student occupancy of the school would not begin until September 2012. Accordingly, 2012 has been selected as the build year for which the environmental assessment areas have been analyzed.

**B. PURPOSE AND NEED**

Development of the new school facility has been proposed primarily to serve the Borough of Queens, as well as high school students citywide. The school facility would serve students from grades 9 through 12, including students enrolled in the District 75 Special Education Program.

The purpose of the proposed project is to provide additional permanent capacity at the high school level in the Borough of Queens, and within Maspeth in particular, which does not contain a high school facility. The DOE's Five-Year Capital Plan for Fiscal Years 2005-2009 identified a need for 9,912 additional high school seats in Queens in order to address existing overcrowding and forecast changes in student enrollments. Overall, high schools in Queens are over utilized at a rate of 108 percent. According to the latest DOE school utilization profile for the 2007-2008 school year, high schools in District 24 are operating at 116 percent of their

## Maspeth High School

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capacity. Nearby high schools in District 24, Newtown High School and Grover Cleveland High School, are over utilized at a rate of 127 and 129 percent, respectively – two of the most over utilized high schools in the city. The proposed facility would provide new high school capacity to help meet this demand.

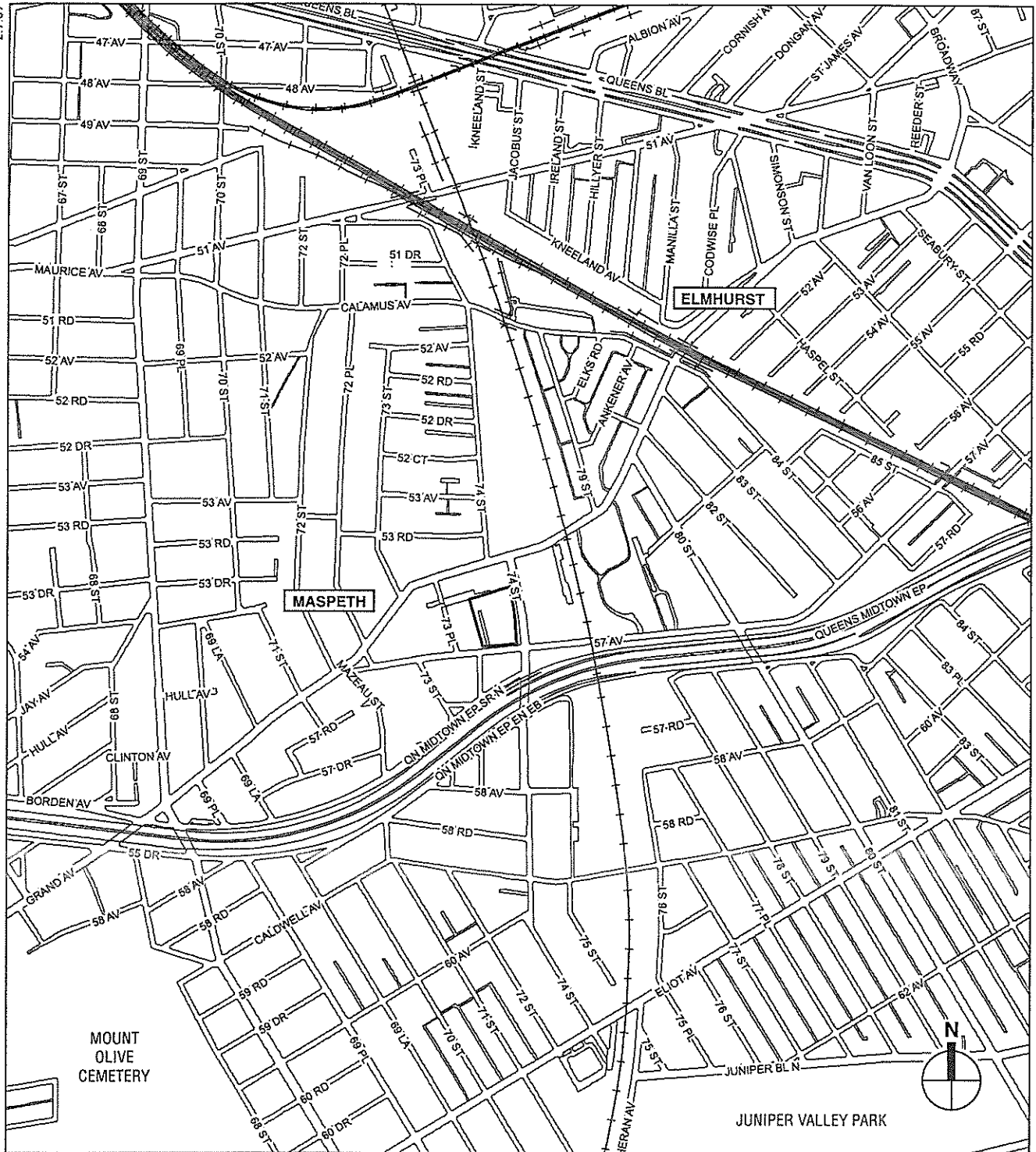
### C. PROJECT SITE AND PROPOSED SCHOOL

The project site is located on Block 2803, Lot 1 in Maspeth, Queens. The site is bounded by existing industrial and commercial buildings to the north, 74th Street to the east, 57th Avenue to the south, and existing residential buildings to the west. The project site is currently occupied by a vacant one-story, 52,100-sf industrial building. The project site is generally located in a mixed-use area containing commercial, industrial, manufacturing, and residential uses. To the west of the site on the corner of 57th Avenue and Grand Avenue is P.S. 58 School of Heroes, a public elementary school.

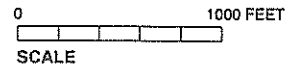
The proposed project would involve demolition of the existing one-story industrial building and construction of a new high school facility. The new school facility would contain classrooms, administrative spaces, and kitchen facilities for two high school organizations, and would employ approximately 85 teachers, administrators, and support staff. The school would operate during normal school hours, 7:00 AM to 4:30 PM from September to June.

The proposed school would be an L-shaped, four-story structure containing approximately 148,280 sf of floor area. The school would have frontage on 57th Avenue and 74th Street, with the main entrance located on the east side of the building along 74th Street. The building would set back above the first floor on 57th Avenue and above the second floor on 74th Street. A large outdoor recreational area containing a walking track and fitness equipment would be located behind the school structure and would be accessed through the school building or by an entryway on 57th Avenue. The recreational area would be screened from adjacent buildings by a high retaining wall to the north and a fence to the west. \*

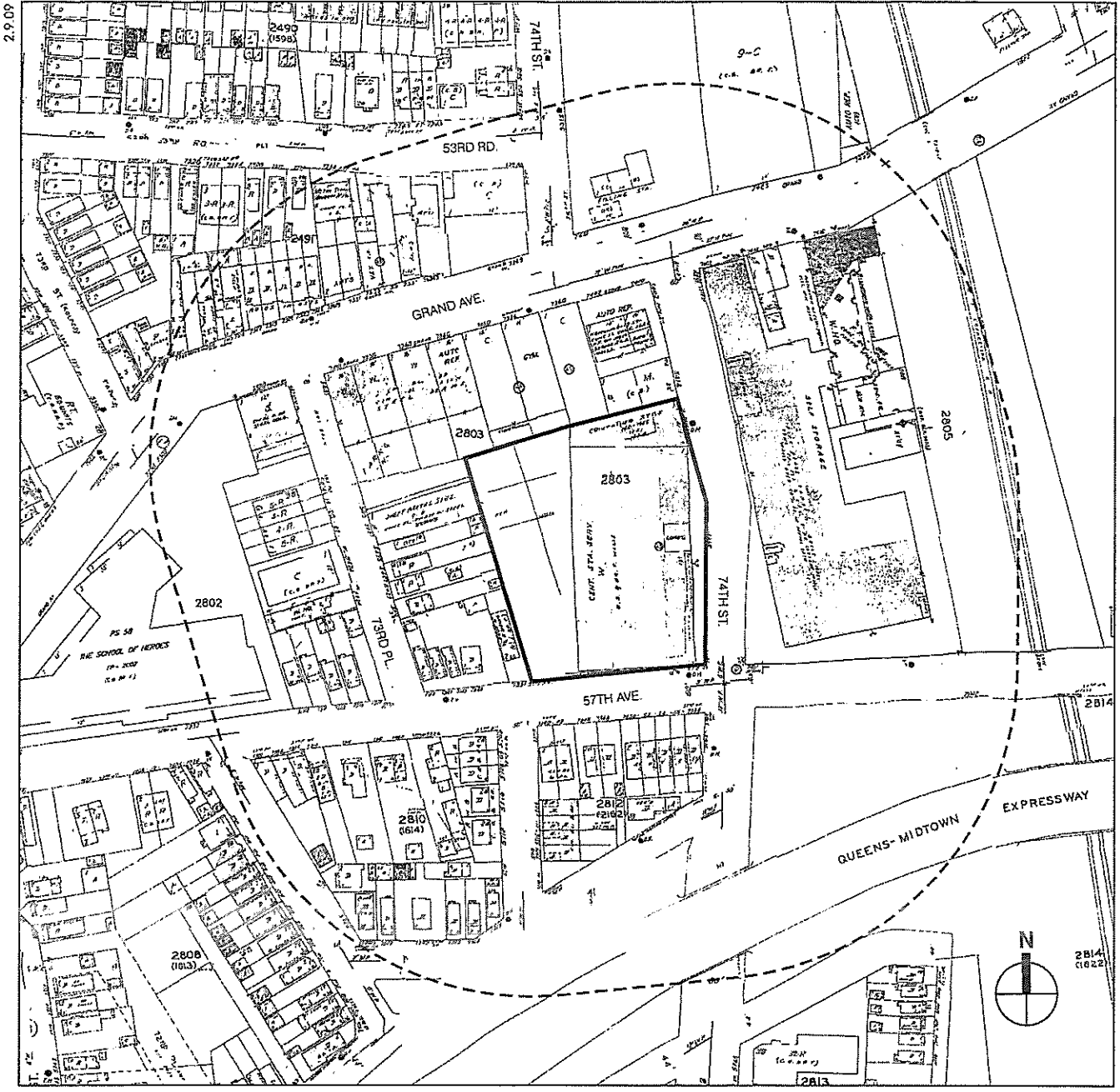
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**Project Site Boundary**

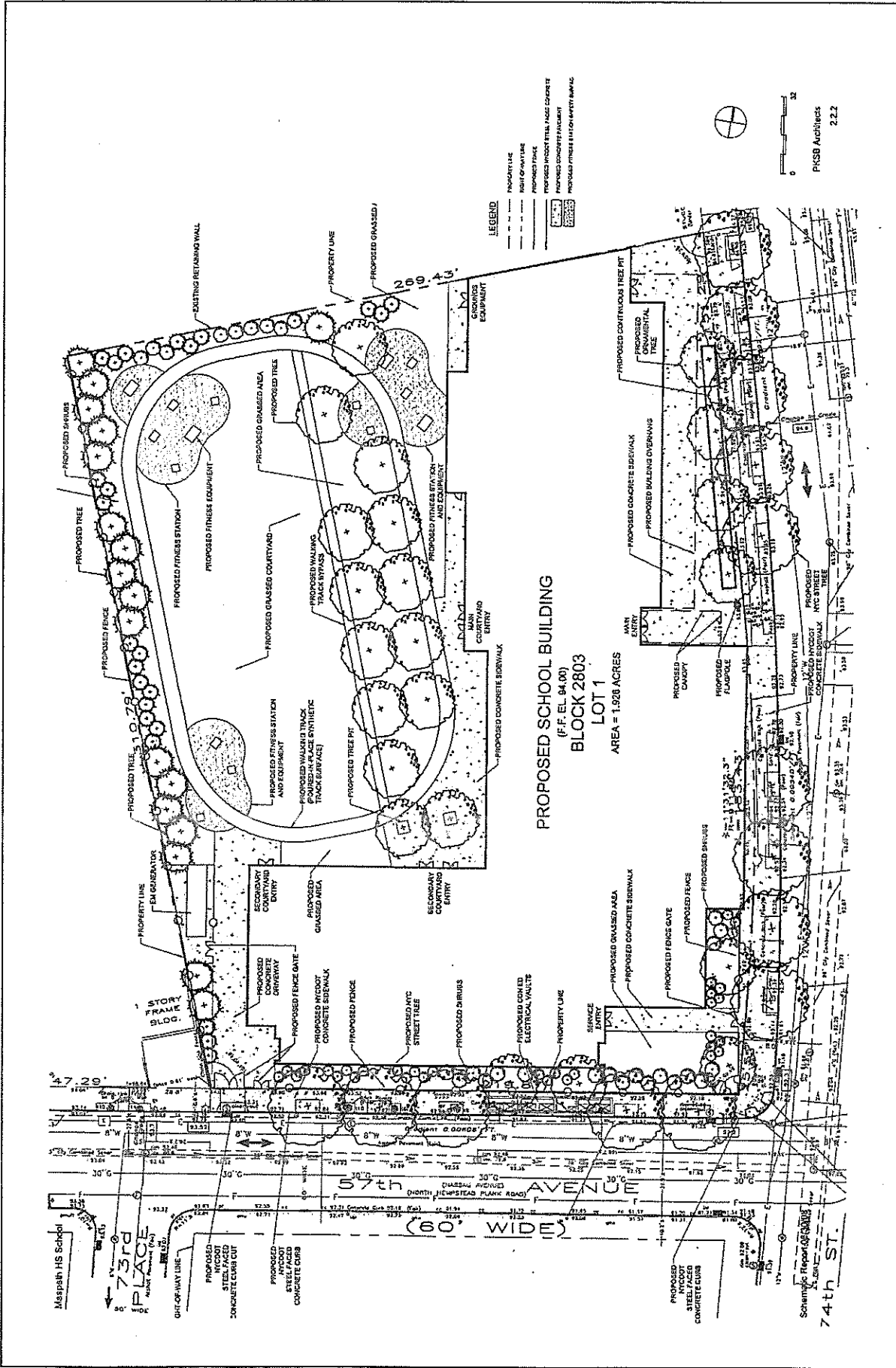






- Project Site Boundary
- - - Study Area Boundary (400-Foot Perimeter)

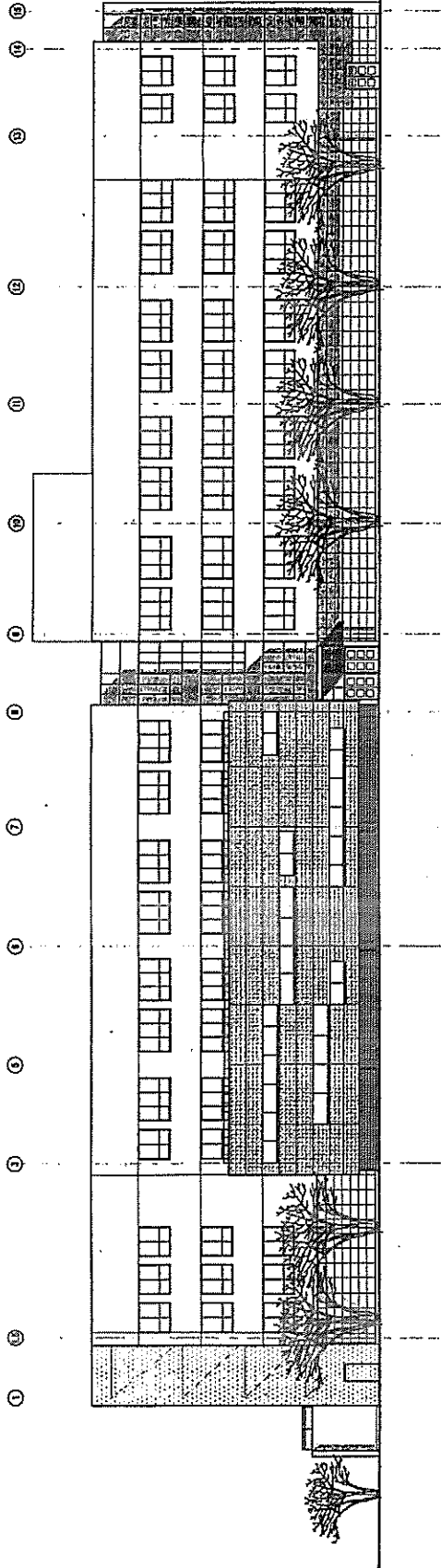
0 100 200 FEET  
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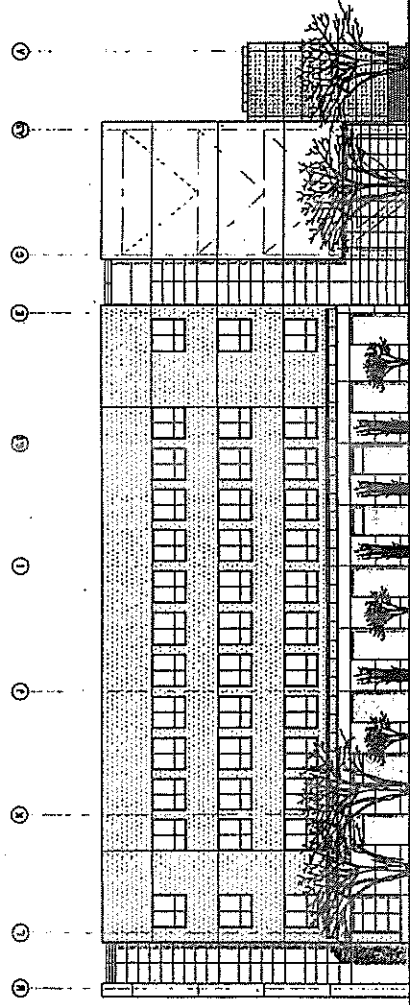
Proposed Site Plan  
Figure 1-3

2.9.09

74th Street Elevation



57th Street Elevation



**A. INTRODUCTION**

This chapter considers the effects of the proposed project on land use, zoning, and community character. The proposed project would entail demolition of an existing one-story industrial building and the construction of a four-story, approximately 1,120-seat high school facility consisting of two separate school organizations with several shared facilities. Land use issues associated with the proposed project include potential changes in local land uses and neighborhood land use patterns. Zoning and public policy issues include the compatibility of the proposed project with public policies and zoning requirements.

As described below, this analysis concludes that construction of the proposed project would be compatible with, and supportive of, existing land uses and ongoing land use trends in the study area, and would not result in any significant adverse impacts to land use, zoning, or community character.

**B. METHODOLOGY**

The 400-foot land use study area roughly extends to 53rd Street to the north, the former New York Connecting Railroad (NYCR) tracks to the east, the Queens Midtown Expressway to the south, and the midblock between 73rd Place and Grand Avenue to the west (see Figure 2-1). This analysis identifies anticipated changes in land use, zoning, and community character that are expected to occur independently of the proposed project by 2012, the project's build year, and assesses any potential adverse impacts to land use, zoning, and community character that would occur as a result of the proposed project.

**C. EXISTING CONDITIONS**

Existing land use patterns and trends are described below for the project site and the study area. This is followed by a discussion of zoning and community character for both areas.

**LAND USE***PROJECT SITE*

The project site is located at 73-35 57th Avenue and 54-44 74th Street in Maspeth, Queens (Block 2803, Lot 1). It is currently developed with a vacant, one-story, 52,100 square foot industrial building. The project site is bounded by existing industrial and commercial buildings to the north, 74th Street to the east, 57th Avenue to the south, and existing residential and industrial buildings to the west. The site has a total lot area of 84,000 sf.

*STUDY AREA*

The study area, generally defined as the 400-foot area surrounding the project site, contains a mix of uses, the most predominant of which are industrial, commercial, and residential. The study area is bounded to the east and south by transportation infrastructure. To the east of the project site the former NYCR tracks are placed in a cut and run north-south while to the south of the project site the elevated Queens Midtown Expressway runs east-west.

Residential uses in the study area are primarily located on the blocks south of the project site between 57th Avenue and the Queens Midtown Expressway Service Road, and along 73rd Place. Residential buildings in this area are typically detached structures, and range in height from two to four stories. Along Grand Avenue west of the project site, many of the residential buildings contain ground-floor commercial spaces.

Industrial uses in the study area include a Stop and Shop warehouse, located directly east of the project site, and NAMCO Machinery Inc., located immediately adjacent to the project site to the west. Other industrial uses in the area include auto-related uses, such as auto body garages and gas stations, which are generally located along Grand Avenue. Commercial uses are primarily located along Grand Avenue and include a Stop and Shop Shopping Center, and neighborhood-oriented retail such as video stores, restaurants, and laundromats.

There is one large community facility use in the study area—P.S. 58 School of Heroes which is located to the west of the project site on Grand and 57th Avenues. Additional community facilities in the study area include a Greek Orthodox Church and Maspeth Animal Hospital both located on Grand Avenue.

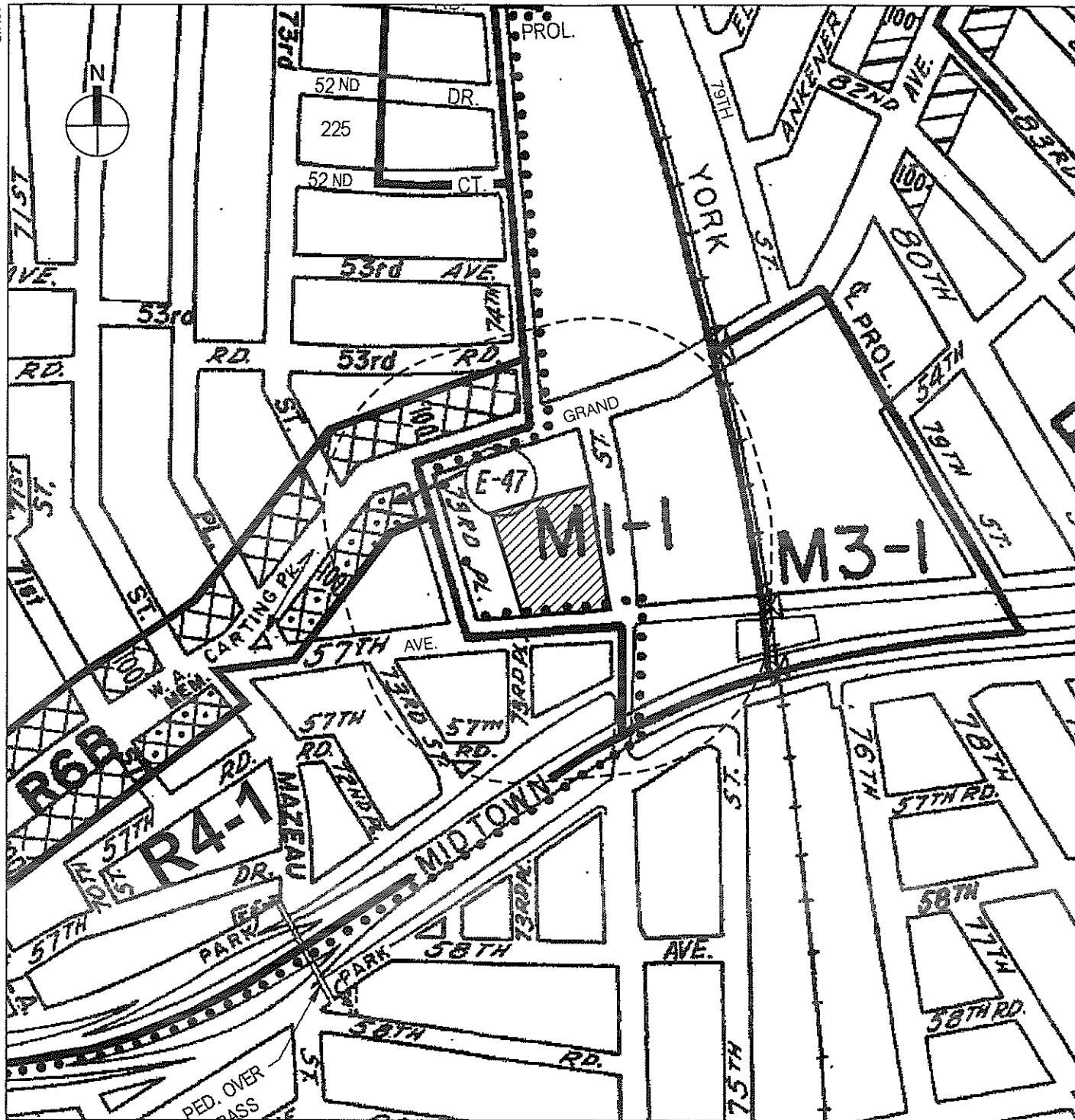
**ZONING AND PUBLIC POLICY**






*PROJECT SITE*

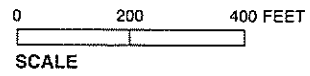
The project site is located in an M1-1 manufacturing zoning district (see Figure 2-2). M1-1 districts permit light manufacturing uses that must meet stringent performance standards and are often located adjacent to residential and commercial districts. M1-1 zoning districts have a maximum allowable floor area ratio (FAR) of 1.0 for manufacturing and commercial uses, and a maximum FAR of 2.4 for community facility uses. Use Group 3 community facilities, including schools, are allowed in M1 zones by special permit of the Board of Standards and Appeals.

*STUDY AREA*

The eastern portion of the study area is within the M1-1 district, described above. The western portion of the study area contains residential R6B and R4-1 districts. R6B districts generally contain four-story attached row houses, many of which are set back from the street by stoops or front yards, and allow a maximum FAR of 2.0. R4-1 districts generally contain three-story attached and detached homes with front yards, and allow a maximum FAR of 0.75. The R6B District contains commercial overlays along Grand Avenue. A C1-2 overlay is mapped on the north side of Grand Avenue and a C2-2 overlay is mapped along the south side. Within these overlay districts, commercial development is allowed at 2.0 FAR.



-  Project Site
-  Study Area Boundary (400-Foot Perimeter)
-  Zoning District Boundary
-  C1-2 Overlay
-  C2-2 Overlay





## COMMUNITY CHARACTER

Community character is defined as the combination of a number of traits, including land use, urban design and visual resources, traffic, and noise. These elements are considered together to create a sense of the neighborhood in which a project is proposed, so that the compatibility of the project within its community setting can be presented and assessed.

### *PROJECT SITE AND STUDY AREA*

The community character of the Maspeth neighborhood is a mix of residential, commercial, industrial, and community facility uses. As mentioned above, the study area is separated from surrounding neighborhoods to the east and south by transportation infrastructure including the former NYCR tracks, which are located below grade and run north-south in the eastern section of the study area and the Queens Midtown Expressway which is elevated and runs east-west to the south.

Aside from the Queens Midtown Expressway, Grand Avenue is the major thoroughfare in the area. It is a two-way street that typically carries local traffic, with one travel lane in each direction and a parking lane on each side of the street. Grand Avenue is also the primary retail corridor, with neighborhood retail located on the ground floor of many residential buildings. Other establishments, such as auto-related businesses and houses of worship, are also located along Grand Avenue.

Generally, the area adjacent to the former NYCR tracks—and immediately surrounding the project site—contains several large industrial and commercial uses, while the remainder of the area is primarily residential. The residential character of the area is defined by a combination of detached houses, and two- to four-story semi-attached and attached brick and frame buildings.

The neighborhood's pedestrian activity is mainly concentrated on Grand Avenue. Pedestrian traffic is mainly to and from bus stops, as well as to the retail and service shops along the thoroughfares. The area is served by the Q58 and Q59 bus routes, which run along Grand Avenue. There are no subway stations in the study area.

## COMMUNITY FACILITIES

Located just west of the project site is P.S. 58, School of Heroes. The nearest high school facility is Grover Cleveland High School located in Ridgewood, Queens. The proposed project is not expected to place additional demands on hospitals and other health care facilities, libraries, or public school or day care facilities.

The project is served by the 104th Police Precinct. The precinct house is located at 64-02 Catalpa Avenue in the Ridgewood section of Queens. The project site is served by Engine 288, located at 56-29 68th Street.

## D. THE FUTURE WITHOUT THE PROPOSED PROJECT

### LAND USE

In the future without the project, the existing one-story building on the site is expected to remain vacant. Directly adjacent to the site to the north, a three-story building is currently under construction. It is anticipated that this building will contain an industrial or commercial use. In

## **Maspeth High School**

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addition, there are two residential buildings located on Grand Avenue which are currently undergoing construction.

There are no additional projects planned within the study area, although there are several residential developments projects in the surrounding area, outside of the 400-foot study area. One notable project that is expected to be completed before 2012 is the new Gas Tank Park, a six-acre park under construction at the former site of the Elmhurst Tanks, just east of the former NYCR tracks.

### **ZONING AND PUBLIC POLICY**

In the future without the proposed project, the zoning on the project site and within the study area is expected to remain unchanged.

### **COMMUNITY CHARACTER**

In the future without the proposed project, it is anticipated that the general character of the community in which the proposed project is located would remain as it is today, with a mix of uses and low-rise character. Any new development that might occur in the study area is not expected to be substantially different from what currently exists, nor is it expected to introduce a significant new source of traffic or noise. Therefore, no change to the existing community character is expected in the future without the proposed project.

### **COMMUNITY FACILITIES**

The Police Department has no plans for any changes that will affect law enforcement services in this portion of the 104th Precinct. Similarly, there are no other projects or changes in fire protection services or equipment expected by the 2012 build year.

## **E. PROBABLE IMPACTS OF THE PROPOSED PROJECT**

### **LAND USE**

#### *PROJECT SITE*

The proposed project would replace the vacant industrial building currently located on the project site with a new school facility that would house two separate high school organizations. The proposed facility is expected to primarily serve students in the Borough of Queens from District 24, although it could also serve high school students citywide.

The proposed school facility is an L-shaped, four-story building containing approximately 148,280 sf of floor area. The proposed school would have frontages along 74th Street and 57th Avenue, with the main entrance located on 74th Street. A large outdoor recreational space would be located behind the school structure, and would be screened from adjacent buildings by a retaining wall and fencing. The proposed school facility would be compatible with surrounding building heights and uses, and would improve conditions on the site by replacing a vacant building with a new community facility use.

### *STUDY AREA*

The proposed school facility would improve the study area by demolishing a vacant former industrial building and constructing a new community facility use. The proposed use of the project site for a new school facility would be compatible with the uses currently found in the study area, including the residential, commercial, and community facility uses. The project site is also adjacent to some industrial uses, including light manufacturing, warehousing, and auto related uses. The new school facility would have site-specific buffering to separate it from the existing industrial uses, including fencing and landscaped buffers along the perimeters to separate it from the existing industrial uses. Therefore, the development of the proposed school facility is not expected to affect adjacent land uses, such as the automotive service facilities located along Grand Avenue or surrounding residential, commercial, or industrial uses.

### **ZONING AND PUBLIC POLICY**

The proposed project would replace an industrial use with a community facility that is allowed in M1-1 zoning districts by Special Permit from the BSA pursuant to Section 42-31 of the New York City Zoning Resolution. Instead of a Special Permit, the SCA would seek approval of a zoning use and bulk override from the Deputy Mayor for Education and Community Development to permit the project to proceed. While the floor area of the proposed project would comply with existing applicable floor area requirements, zoning waivers may be required for rear yard, street wall setback, sky exposure plane, and rear yard obstruction requirements.

If the zoning override is granted, it would apply only to the project site and would have no impact on neighboring zoning or property. Therefore, the proposed project would have no significant adverse impacts to local zoning.

### **COMMUNITY CHARACTER**

In the future with the proposed project, the vacant industrial building on the site would be replaced with a new school facility that would be similar in scale to existing buildings and compatible with surrounding residential, industrial, commercial, and community facility uses. The increase in traffic volumes with the proposed project is not expected to result in any significant adverse impacts to the character of the community.

### **COMMUNITY FACILITIES**

The new high school facility would provide additional community resources for area residents, and is expected to relieve overcrowding in nearby high schools. The Police and Fire Departments frequently monitor conditions to determine how their personnel are deployed. Decisions to alter existing deployment patterns would be made only in response to a demonstrated change in demand. Police and fire services would be adjusted as deemed necessary by both agencies, and no significant adverse impacts to police or fire services are expected to result from the proposed project. \*

**A. INTRODUCTION**

This chapter assesses the potential for the new approximately 1,120-seat high school facility to impact historic resources. The project site, 54-44 74th Street, is located on a block bounded by Grand Avenue to the north, 74th Street to the west, 57th Avenue to the south, and 73rd Place to the west, in the Maspeth section of Queens. The proposed project would result in the demolition of the existing building on the project site and the construction of a new, approximately 148,280 square foot (sf) school building.

Historic resources include both archaeological and architectural resources. The study area for archaeological resources is the project site itself, which is the area that could be disturbed by the project's construction. To determine whether the project site could be sensitive for archaeological resources, a Preliminary Assessment/Disturbance Memo was prepared.<sup>1</sup>

Study areas for architectural resources are determined based on the area of potential effect for construction-period impacts (for example, ground-borne vibrations), as well as a larger area of potential effect for visual or contextual effects. The study area for architectural resources has been defined as the area within approximately 400 feet of the project site, which is roughly bounded by 53rd Road to the north, the former New York Connecting Railroad (NYCR) tracks to the east, the Queens-Midtown Expressway to the south, and 73rd Street to the west. (A set of photographs of the project site and the study area is included in Chapter 4, "Urban Design and Visual Resources.") Within the study area, architectural resources considered include National Historic Landmarks (NHLs), properties listed on or determined eligible for listing on the State and National Registers of Historic Places (S/NR), New York City Landmarks (NYCLs) or New York City Historic Districts (NYCHDs), and properties pending NYCL or NYCHD designation. In addition, other properties in the study area were evaluated for their potential S/NR or NYCL eligibility ("potential architectural resources").

As described in greater detail below, there are no known or potential architectural resources on the project site or in the study area. Therefore, the proposed project would not have any adverse physical, visual, or contextual effects on architectural resources. Further, the project site has been determined to have a low to moderate sensitivity for precontact period archaeological resources and to not be sensitive for historic period resources. Therefore, no impacts to archaeological resources are anticipated with the proposed project.

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<sup>1</sup> Preliminary Assessment/Disturbance Record, Proposed Maspeth High School, 54-44 74th Street, Maspeth, Queens, New York, 11373, Block 2803, Lot 1. Prepared August 2008.

## **B. EXISTING CONDITIONS**

### **ARCHAEOLOGICAL RESOURCES**

The Preliminary Assessment/Disturbance Memo, prepared by Historical Perspectives, Inc (HPI), is summarized below.

#### *PRECONTACT PERIOD RESOURCES*

From what is known of precontact period (Native American) settlement patterns in Queens and the surrounding area, most habitation and processing sites are found in sheltered, elevated areas close to wetland features or major waterways, and with nearby sources of fresh water. Cartographic evidence confirms that these criteria were present on the project site prior to modern regrading and development, including a nearby fresh water source (100 feet to the east), and a location near an important Native American trail, the precursor to Grand Avenue north of the project site.

However, more attractive locations, including those closer to marsh resources, less sloping, and more elevated to provide a view over the surrounding terrain, existed in the general area. Prior to modern regrading, the project site was fairly sloped, which would argue against precontact habitation. Further, no previously documented precontact archaeological sites have been identified on the project site or have been recorded within a one-mile radius of the project site.

Precontact archaeological resources tend to be shallowly-buried (i.e., are generally found within three to four feet of the natural ground surface). Documented disturbance on the project site includes the addition of 10 to over 25 feet of fill to the site when the adjacent streets were laid out and the site was graded.

Based on the criteria for the location and identification of potential precontact sites and the documented site disturbance, the project site has been determined to have a low to moderate potential to host precontact archaeological resources. Therefore, further archaeological study for precontact resources is not warranted.

#### *HISTORIC PERIOD RESOURCES*

The existing industrial building on the project site, built in 1955, was the first building constructed on the site. It is therefore unlikely that the project site was used as a location for privies, cisterns, or wells, and, as such, the project site has been determined to be not sensitive for historic period resources.

### **ARCHITECTURAL RESOURCES**

#### *PROJECT SITE*

The project site is not located in a NYC Historic District or S/NR Historic District nor does it contain structures that have been listed on or determined eligible for listing on the S/NR or as NYCLs.

The project site contains a vacant, one-story, concrete industrial building constructed in 1955. The project site building does not possess the design qualities or historic significance that would qualify it for S/NR or NYCL eligibility. Therefore, no known or potential architectural resources have been identified on the project site.

*STUDY AREA*

*Known Architectural Resources*

There are no known architectural resources in the study area.

*Potential Architectural Resources*

The study area is mostly developed with buildings which appear to date from the mid- to late-20th century. A recent survey of the study area by an architectural historian did not identify any potential architectural resources that appear to meet the eligibility criteria for S/NR listing or NYCL designation.

**C. THE FUTURE WITHOUT THE PROPOSED PROJECT**

In the future without the project, the existing one-story industrial building on the project site is expected to remain vacant. Directly adjacent to the site to the north, a three-story building is currently under construction. It is anticipated that this building will contain an industrial or commercial use. In addition, there are two residential buildings currently undergoing construction on Grand Avenue.

**D. PROBABLE IMPACTS OF THE PROPOSED PROJECT**

**ARCHAEOLOGICAL RESOURCES**

As the project site has been determined to have a low to moderate sensitivity for precontact period resources and to be not sensitive for historic period resources, it is not anticipated that the proposed project would adversely impact archaeological resources.

**ARCHITECTURAL RESOURCES**

*PROJECT SITE*

As described above, there are no architectural resources on the project site. Therefore, the proposed project would not have any adverse impacts on on-site architectural resources.

*STUDY AREA*

As there are no known or potential architectural resources in the study area, the proposed project would not have any adverse physical, visual, or contextual impacts on architectural resources in the study area. \*



**A. INTRODUCTION**

This chapter considers the potential effects of the proposed new high school facility on the urban design and visual resources of the surrounding area.

The project site has frontages onto both 57th Avenue and 74th Street and is located on a block bounded by 74th Street to the east, 57th Avenue to the south, 73rd Place to the west and Grand Avenue to the north (see Figure 4-1). Views to the project site are limited primarily to the immediately surrounding streets. Therefore, the study area for this analysis has been defined as the project site and the area within approximately 400 feet of the project site (see Figure 4-1). Figure 4-1 contains a map of the study area, and Figures 4-2 through 4-8 present views of the project site and the study area.

Urban design components and visual resources determine the “look” of a neighborhood—its physical appearance, including the size and shape of buildings, their arrangement on blocks, the street pattern, and noteworthy views that may give an area a distinctive character. The following analysis addresses each of these characteristics for existing conditions and in the future both without and with the proposed project.

As described below, the proposed project would improve the appearance of the project site and the surrounding area by replacing a vacant, one-story building with a new school facility. The proposed facility would include an entry plaza on 74th Street, and would be landscaped with new street trees along 74th Street and 57th Avenue. The proposed project would not have any adverse impacts on the urban design and visual resources of the study area as it would not alter the street pattern, block shapes, or natural features of the study area, nor would it introduce a new or incompatible use. Finally, the proposed project would not block any significant views or visual resources.

**B. EXISTING CONDITIONS****PROJECT SITE***URBAN DESIGN*

The project site is located at 73-35 57th Avenue and 54-44 74th Street on a large, corner lot on the block bounded by 74th Street to the east, 57th Avenue to the south, 73rd Place to the west and Grand Avenue to the north. The project site is developed with a vacant, one-story brick and concrete building (see View 1 of Figure 4-2), which is clad in a mix of brick, concrete, and corrugated metal panels. The 74th Street façade has large, vehicular openings which are covered in metal, roll-down gates and smaller openings which have been filled in with concrete blocks. A large paved area, previously used for truck parking and as a loading area, is located on the western edge of the site (see View 2 of Figure 4-2). This entrance area is surrounded by a tall, metal chain-link fence. Along the 74th Street frontage of the project site there is a chain-link fence.

*VISUAL RESOURCES AND VIEW CORRIDORS*

There are no visual resources on the project site or visible from the project site and immediately surrounding streets. Views to the east, north and west are limited to the blockfronts facing the project site. Views to the south are short, and blocked by the elevated Queens Midtown Expressway.

**STUDY AREA**

The study area primarily consists of residential buildings of different types. The discussion below focuses first on the area's urban design (its basic layout and structures) and then describes its visual resources.

*URBAN DESIGN*

The study area is developed with a mix of buildings uses and types, including industrial, residential, and institutional buildings. The streets are laid out in an irregular pattern creating a variety of block shapes and forms.

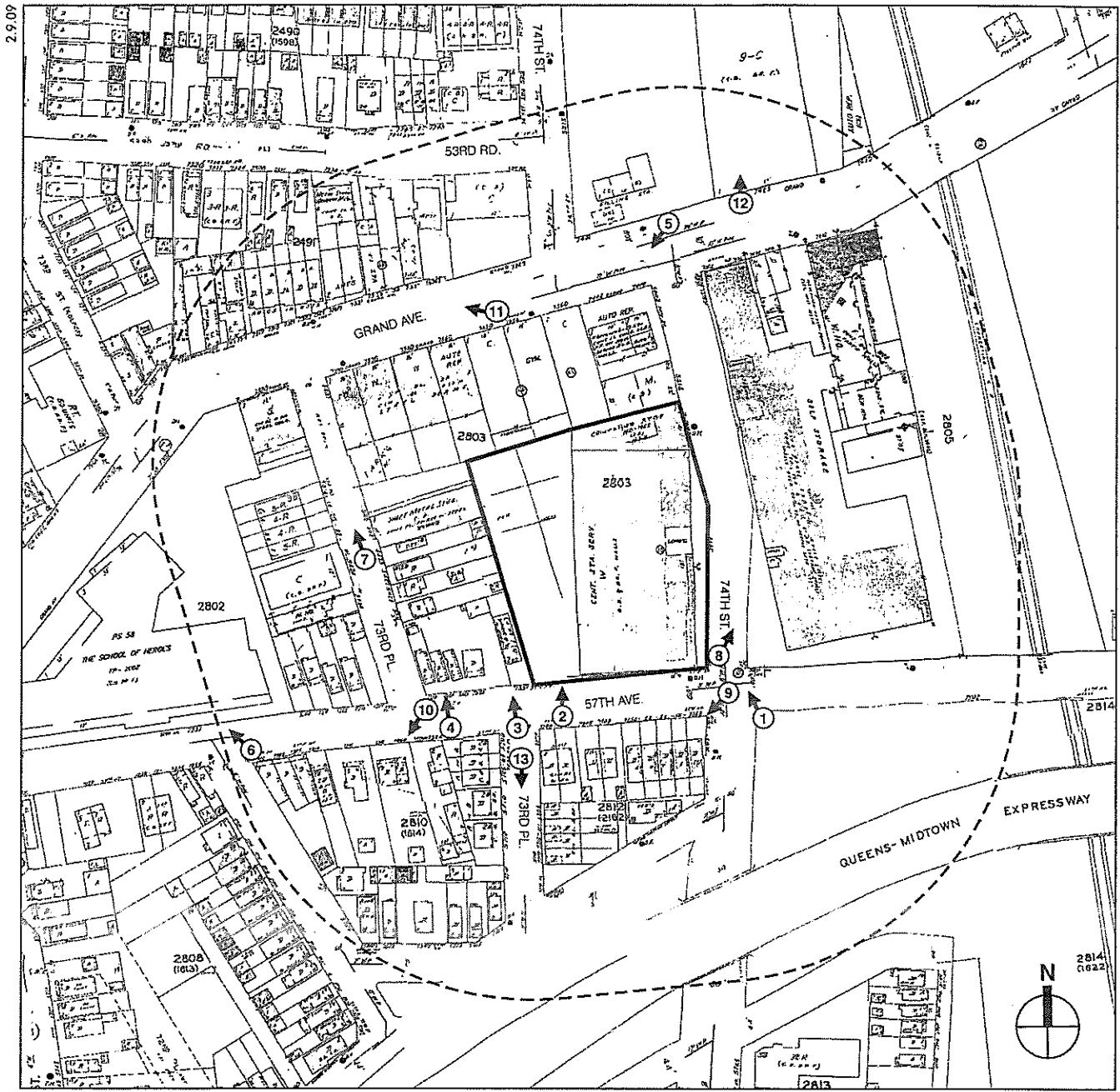
The southern section of the study area is defined by the elevated Queens Midtown Expressway, a portion of the Long Island Expressway which provides access between the Queens Midtown Tunnel and Queens Boulevard.




Grand Avenue, 74th Street and 57th Avenue are the other main thoroughfares in the study area; each street has one lane of traffic running in each direction with a row of parking on either side. Grand Avenue is a wide avenue which travels east-west through the study area and connects Metropolitan Avenue and Queens Boulevard, both located outside of the study area. 74th Street, a wide street, runs north-south with the northern terminus at Grand Avenue; to the south it extends past the study area. 57th Avenue runs east-west through the study area and carries traffic through central Queens.

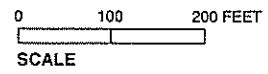
The topography of the study area is relatively flat. Natural features include streets trees and two small parks: the Quick Brown Fox Triangle and a sitting area. The Quick Brown Fox Triangle, located at the intersection of 57th Road, 73rd Street, and the Queens Midtown Expressway service road, has benches, trees, landscaping and a wooden statue of a fox. The sitting area is located on the southeast corner of 57th Avenue and 74th Place. It has benches, tall trees, and paved areas.

The sidewalks in the study area are well maintained, with numerous curb cuts for both the residential buildings and the industrial structures. For the most part the area's streets are lined with trees. Street furniture is limited and includes standard metal street signs and traffic lighting.

The remainder of the project site block is developed a mix of commercial, residential, industrial and mixed commercial and residential structures. On 57th Avenue, adjacent to the project site, is a two-story red-brick structure, set back from the sidewalk by a sloped driveway (see View 3 of Figure 4-3). The adjoining parcel is a paved parking area surrounded by a tall fence with a metal roll-down gate. The remaining structures on 57th Avenue include three two-story houses, all designed in the same style with steeply pitched roofs (see View 4 of Figure 4-4). The houses are set back from the sidewalk line by deep, landscaped lawns. Along the Grand Avenue frontage of the project site there is a mix of commercial and light industrial buildings. The buildings are all one story in height, constructed to the sidewalk line, and have a mix of signs and awnings (see View 5 of Figure 4-4).

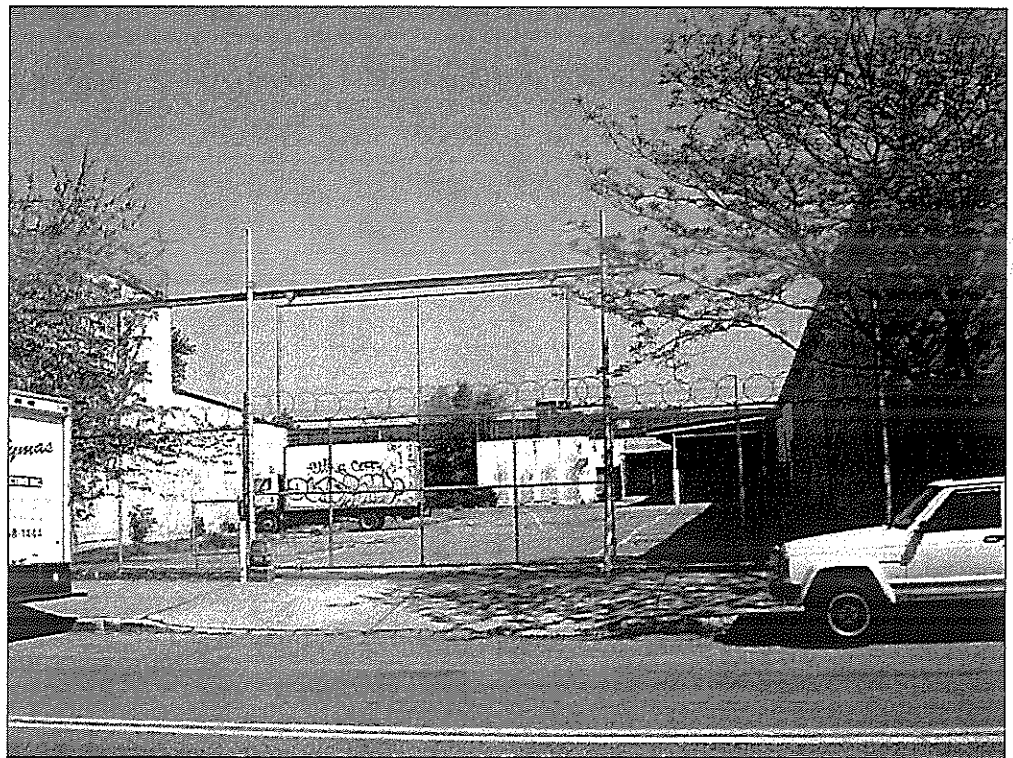


-  Project Site Boundary
-  Study Area Boundary (400-Foot Perimeter)
-  Photo View Direction and Reference Number





Project site, view northwest from 57th Avenue and 74th Street 1



Entrance to project site parking area, view north on 57th Avenue 2



Parcel adjacent to project site, view north on 57th Avenue 3



Residential buildings on project site block, view north on 57th Street 4

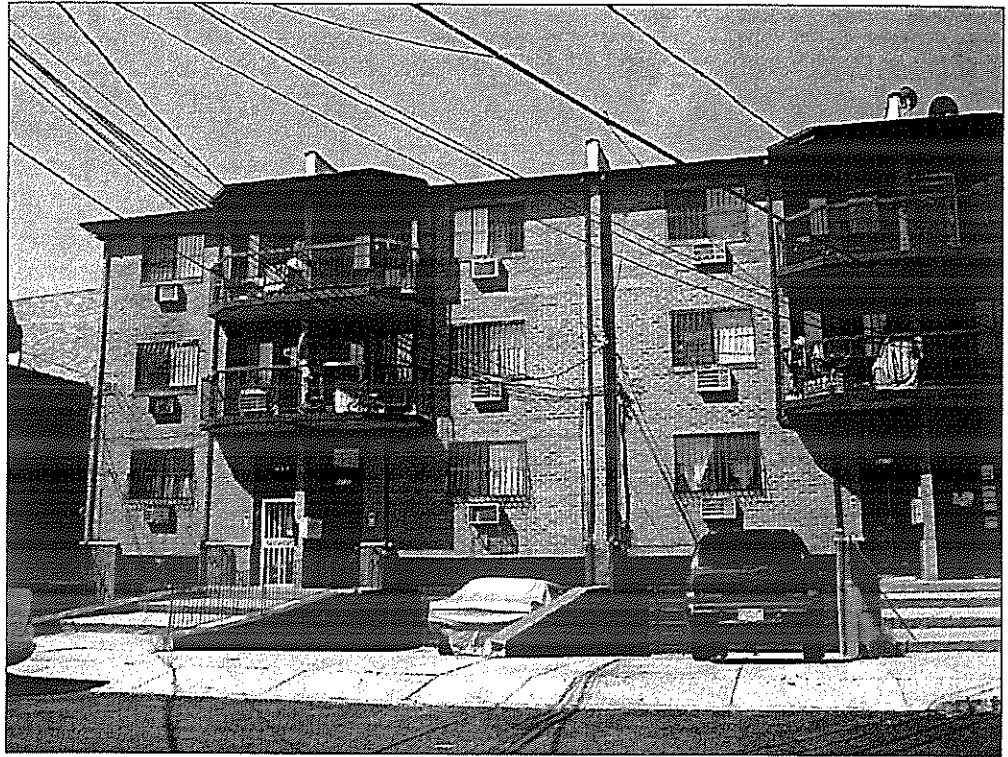




Grand Avenue, view southwest from 74th Street 5



P.S. 58, School of Heroes, 57th Avenue facade 6



Residential buidings on 73rd Place 7

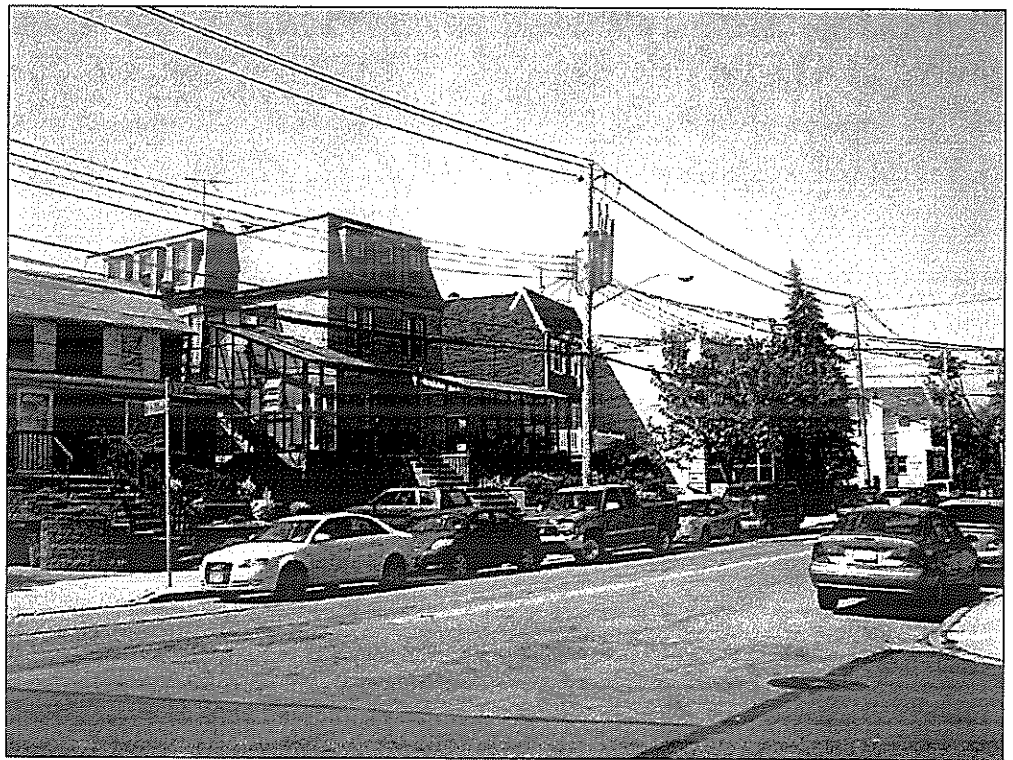


Stop and Shop storage warehouse, view northeast on 74th Street 8





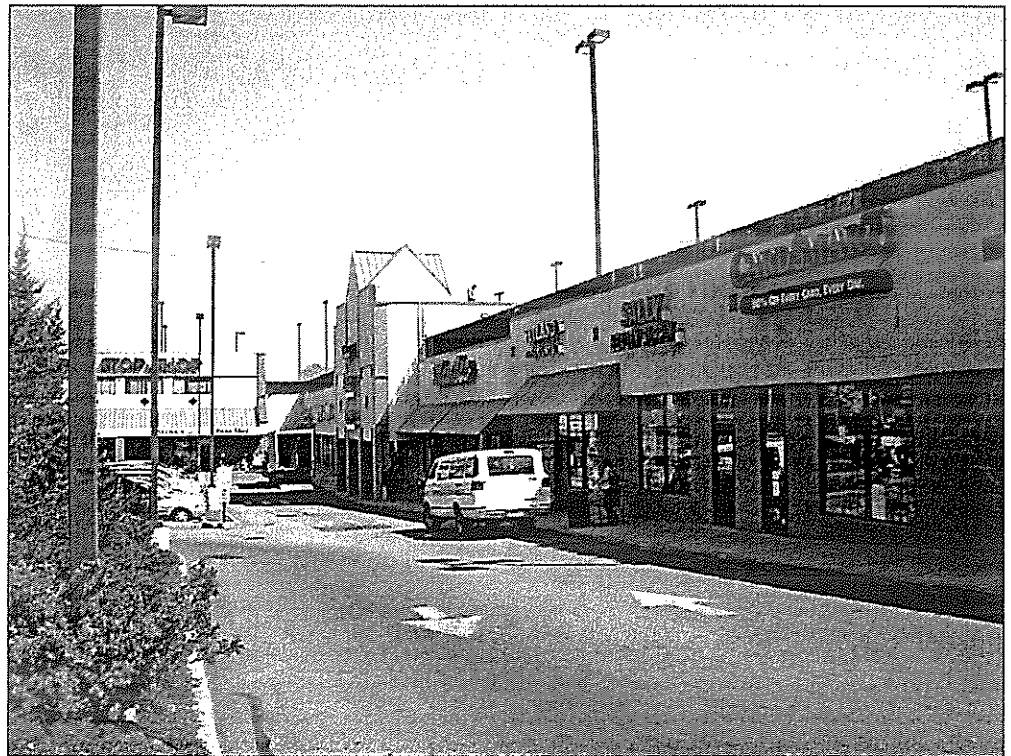
Residential building, view southwest on 57th Avenue from 74th Street 9



Residential building, view southwest on 57th Avenue and 73rd Place 10



North side of Grand Avenue, view northwest from Grand Avenue near 74th Street 11



Stop and Shop shopping plaza, view north from Grand Avenue 12



View south on 73rd Place from 57th Avenue 13

On the block west of the project site there is a mix of residential buildings, commercial buildings, and a large school—P.S. 58 School of Heroes—which occupies the majority of the block (see View 6 of Figure 4-4). P.S. 58 School of Heroes is constructed to the sidewalk line on both 57th Avenue and Grand Avenue. It is three stories in height and clad in various shades of brick with large, fixed windows placed evenly on all the facades. The school also has a large paved area with play equipment. The Grand Avenue frontage is surrounded by a tall, metal chain-link fence. The residential buildings on the block face onto 73rd Place. They are primarily three-story attached houses, which are set back from the sidewalk line by wide driveways; they are clad in light colored brick and have large balconies (see View 7 of Figure 4-5).

To the east of the project site is a large, two-story Stop and Shop warehouse (see View 8 of Figure 4-5). The building has a flat roof, is constructed to the sidewalk, and has large vehicular openings and a loading dock on 74th Street. On the same block, facing onto Grand Avenue are two, three-story commercial buildings which are clad in light brick and have a heavy cornice line.

The area south of the project site is mainly developed with a mix attached and detached residential buildings. Along the south side of 57th Avenue is a group of two-story, attached red-brick residences (see View 9 of Figure 4-6). The buildings are set back from sidewalk by paved parking areas, which are mostly surrounded by low, metal, chain-link fences. There are also a number of larger, detached residences (see View 10 of Figure 4-6). These buildings are set back from the street by long stairways and are clad in a variety of materials including brick and modern siding.

Grand Avenue, north of the project site, is lined with a mix of residential, commercial and mixed residential and commercial buildings (see View 11 of Figure 4-7). In addition to the buildings described above, there is a group of five, attached one-story, red-brick residences. These buildings have pitched roofs, projecting awnings and are set back behind lawns or paved driveways. There are also a number of buildings which have commercial spaces on the ground floor with residential spaces above. These buildings have large display windows on the ground floor, are set back at different distances and have a variety of awnings and signs. There are also two parcels which have been cleared and are currently surrounded by tall, wood, construction fences.

North of the project site and east of 74th Street is a large commercial structure—the Stop and Shop shopping plaza—which is one and two stories in height, “L-shaped” in plan and contains numerous commercial spaces (see View 12 of Figure 4-7). The building is set back from Grand Avenue by a large, paved parking area.

The easternmost section of the study area is defined by the former New York Connecting Railroad tracks. The tracks, which are placed in a deep cut, are no longer active and tall, mature trees line either end of the tracks.

The streetscape of the study area is varied. Along 74th Street the project site building and the storage warehouse create consistent, solid streetwalls. In contrast, some of the residential streets have buildings set back at various distances, creating an irregular streetscape. Further, the streetscape along Grand Avenue is continuous along the southern side, but on the northern side it is interrupted by buildings which are set back a distance and by the two cleared parcels. In the southern section of the study area, the Queens Midtown Expressway, which is placed on concrete supports and has tall sound barriers, creates a solid wall which is only interrupted by 74th Street (see View 13 of Figure 4-8).

### *VISUAL RESOURCES AND VIEW CORRIDORS*

There are no visual resources in the study area, nor can any be seen from the study area. Views are long looking east and west on 57th Avenue. Views south are blocked by the elevated Queens Midtown Expressway and views west are mostly blocked by the large storage warehouse. Views north terminate with the buildings along Grand Avenue. Views east along Grand Avenue are short due to the curve of the street.

### **C. THE FUTURE WITHOUT THE PROPOSED PROJECT**

In the future without the project, the existing one-story industrial building on the project site is expected to remain vacant. Directly adjacent to the site to the north, a three-story building is currently under construction. It is anticipated that this building will contain an industrial or commercial use. In addition, there are two residential buildings currently under construction on Grand Avenue.

### **D. PROBABLE IMPACTS OF THE PROPOSED PROJECT**

#### **PROJECT SITE**

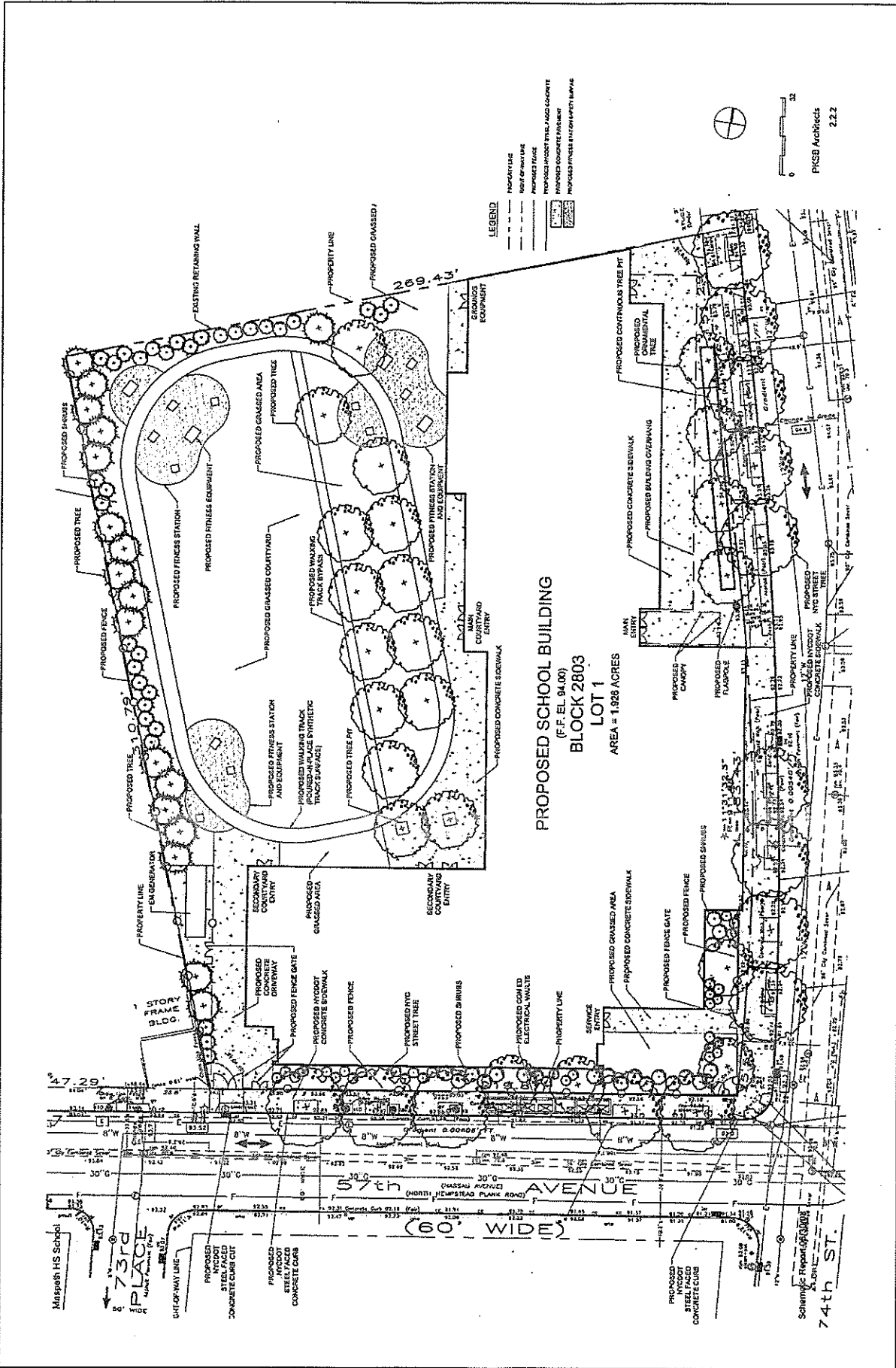
##### *URBAN DESIGN*

The proposed project would replace a vacant, one-story industrial building with a new, actively-used high school facility. The new building would be approximately 148,280 square feet in size and would house classrooms, administrative offices, library, cafeteria, kitchen, gymnasium, auditorium, computer/technical labs, medical suite, storage facilities, locker rooms, and custodial spaces.

The new facility would be "L-shaped" in plan and have frontages onto both 74th Street and 57th Avenue, with the main entrance on 74th Street (see Figures 4-9 and 4-10). The majority of the building would be four stories in height; along 57th Avenue the building would be set back behind a one-story structure while on 74th Street the building would be set back behind a two-story structure or a landscaped plaza. The building entrance would be located on 74th Street and would be deeply recessed to create an identifiable entrance and to serve as a public access point for the public assembly spaces located inside the building.

In order to reflect the mixed residential and industrial character of the surrounding area the building would be clad in a variety of materials, mostly light-colored brick. Further, the different elevations of the building would break up the massing of the new school building.

There would also be a large, interior courtyard on the northwest corner of the project site. The interior courtyard would feature a walking track, exercise stations, and tall trees. A new curb cut and concrete driveway would be placed on 57th Avenue to allow for vehicle ingress and egress to the interior loading areas. Several curb cuts along 74th Street would be removed and new sidewalks would be constructed along 74th Street and 57th Avenue. The perimeter of the project site would also be landscaped with new street trees.

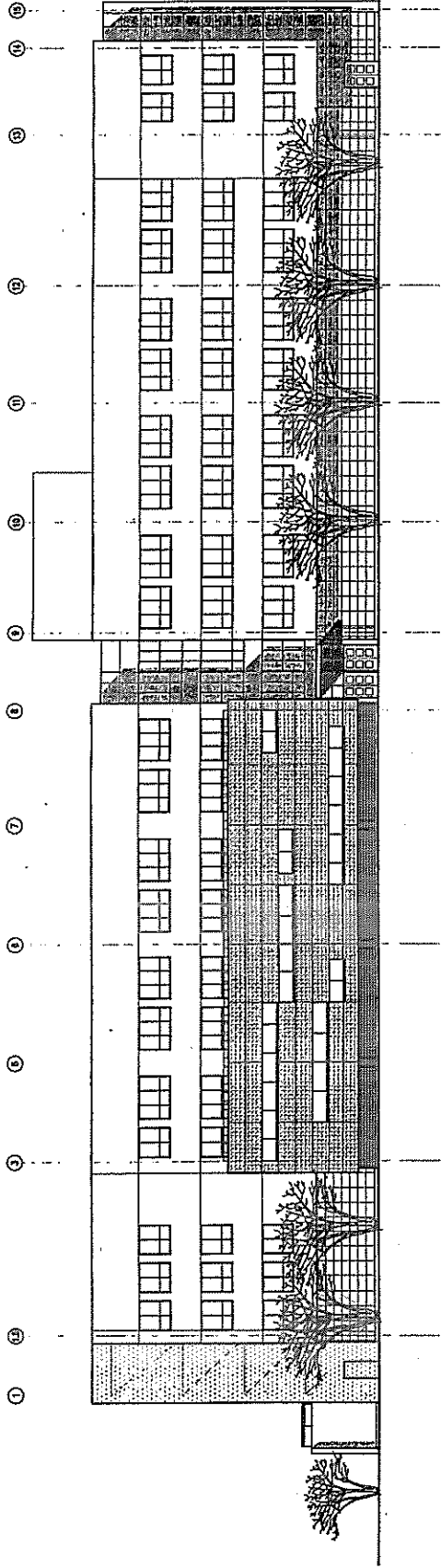


Proposed Site Plan  
Figure 4-9

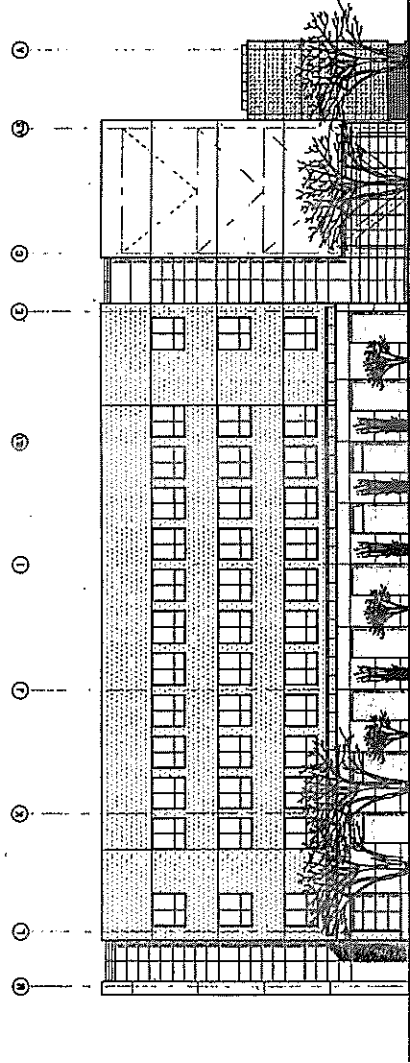


2.9.09

74th Street Elevation



57th Street Elevation



Proposed Project - Elevations  
Figure 4-10



*VISUAL RESOURCES AND VIEW CORRIDORS*

There are no visual resources on the project site or significant view corridors from the project site. Therefore, the proposed project would not block views of any resources or any significant view corridors.

**STUDY AREA**

*URBAN DESIGN*

The proposed project would replace a vacant building with a new, actively-used high school building. The new school would be constructed on an existing block and would not alter the street patterns in the study area. The proposed school would be in keeping with the structures found in the study area, including the existing P.S. 58 School of Heroes building and the residential buildings.

While the new school building would be taller than the existing building on the project site and the immediately surrounding buildings, it would not be significantly taller than the surrounding buildings. Further, it would be comparable in scale and bulk to the existing P.S. 58 building located one block to the west of the project site. The majority of the building would be set back behind either a one-story or two-story section thereby creating nearly continuous streetwalls along both 57th Avenue and 74th Street. The new landscaping, including the new plaza and the main entrance, would improve the appearance of the project site and the surrounding area. Further, the exterior materials, including the use of light brick, would match materials found in the study area.

Overall, the proposed project would improve the appearance of the project site and surrounding area by replacing the vacant and underutilized building with a new, compatible use. The site would be surrounded by new trees which would create a buffer between the outside play areas and adjacent buildings and would improve the appearance of the project site.

*VISUAL RESOURCES AND VIEW CORRIDORS*

The proposed project would not have any adverse impacts on visual resources, as no significant visual resources have been identified in the study area. While the proposed addition would be visible from the adjacent streets, it would be built on an existing block and would not block any significant views.

Overall, no significant adverse impacts to the urban design and visual resources of the study area are anticipated as a result of the proposed project. \*

## A. INTRODUCTION

The proposed high school would generate new trips from students and staff traveling to and from the project site. This section examines the potential for impacts of the proposed school project on traffic and parking in the Maspeth section of Queens. (Potential impacts of the proposed project with regard to transit and pedestrian facilities are described in Chapter 6, "Transit and Pedestrians.") The proposed school, expected to be operational in 2012, would serve approximately 1,120 students and would be staffed by approximately 85 teachers and administrative personnel.

## B. METHODOLOGY

The operation of all of the signalized intersections and unsignalized intersections in the study area were assessed using methodologies presented in the *2000 Highway Capacity Manual (HCM)*. A description of the principles of each of these methodologies is provided below.

### SIGNALIZED INTERSECTIONS

The level-of-service (LOS) for a signalized intersection is based on the average stopped delay per vehicle for the various lane groups (grouping of movements in one or more travel lanes). The levels of service are defined below:

**LOS Criteria for Signalized Intersections**

Level-of-Service (LOS)	Delay
A	≤ 10.0 seconds
B	> 10.0 and ≤ 20.0 seconds
C	> 20.0 and ≤ 35.0 seconds
D	> 35.0 and ≤ 55.0 seconds
E	> 55.0 and ≤ 80.0 seconds
F	> 80.0 seconds

Source: Transportation Research Board. *Highway Capacity Manual, 2000.*

Although the HCM methodology calculates a volume-to-capacity (v/c) ratio, there is no strict relationship between v/c ratios and LOS as defined in the *HCM*. A high v/c ratio indicates substantial traffic passing through an intersection, but a high v/c ratio combined with low average delay actually represents the most efficient condition in terms of traffic engineering standards, where an approach or the whole intersection processes traffic close to its theoretical maximum with minimal delay. However, very high v/c ratios—especially those approaching or greater than 1.0—are often correlated with a deteriorated LOS. Other important variables affecting delay include cycle length, progression, and green time. LOS A and B indicate good operating conditions with minimal delay. At LOS C, the number of vehicles stopping is higher, but congestion is still fairly light. LOS D describes a condition where congestion levels are more noticeable and individual cycle failures (a condition where motorists may have to wait for more

than one green phase to clear the intersection) can occur. Conditions at LOS E and F reflect poor service levels, and cycle failures are frequent. The *HCM* methodology provides for a summary of the total intersection operating conditions by identifying the two critical movements (the worst case from each roadway) and calculating a summary of critical v/c ratio, delay, and LOS.

### UNSIGNALIZED INTERSECTIONS

For unsignalized intersections, the total delay is defined as the total elapsed time from which a vehicle stops at the end of the queue until the vehicle departs from the stop line. This includes the time required for the vehicle to travel from the last-in-queue to the first-in-queue position. The average total delay for any particular minor movement is a function of the service rate or capacity of the approach and the degree of saturation. The LOS criteria for unsignalized intersections are summarized below:

**LOS Criteria for  
Unsignalized Intersections**

LOS	Average Delay
A	≤ 10.0 seconds
B	> 10.0 and ≤ 15.0 seconds
C	> 15.0 and ≤ 25.0 seconds
D	> 25.0 and ≤ 35.0 seconds
E	> 35.0 and ≤ 50.0 seconds
F	> 50.0 seconds
Source: Transportation Research Board. <i>Highway Capacity Manual, 2000.</i>	

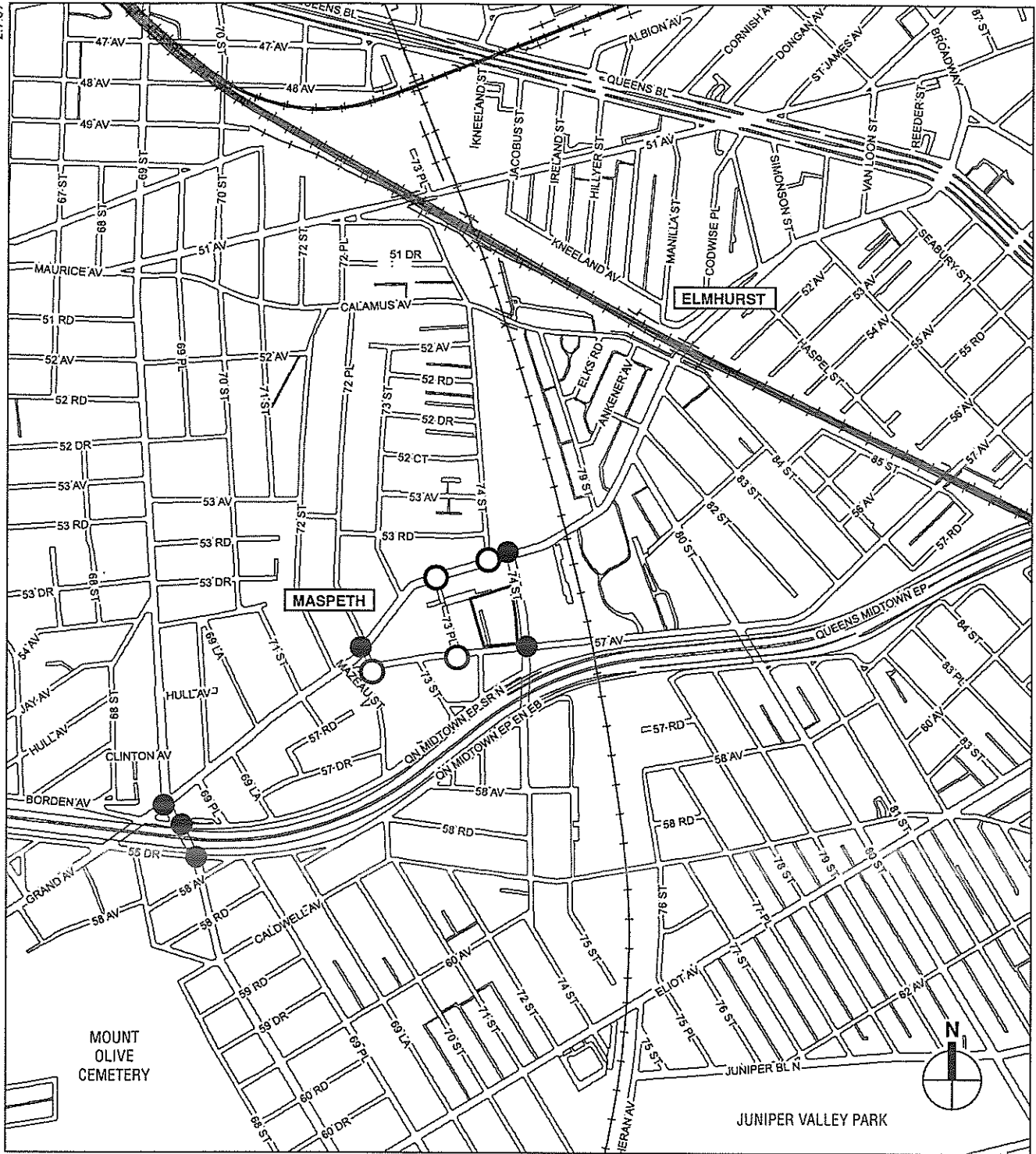
The LOS thresholds for unsignalized intersections are different from those for signalized intersections. The primary reason is that drivers expect different levels of performance from different types of transportation facilities. The expectation is that a signalized intersection is designed to carry higher traffic volumes than an unsignalized intersection. In addition, certain driver behavioral considerations combine to make delays at signalized intersections less onerous than at unsignalized intersections. For example, drivers at signalized intersections are able to relax during the red interval, whereas drivers on minor approaches to unsignalized intersections must remain attentive to identifying acceptable gaps and vehicle conflicts. Also, there is often much more variability in the amount of delay experienced by individual drivers at unsignalized intersections. For these reasons, the total overall scale of delay thresholds for unsignalized intersections is lower than that of signalized intersections.




## C. EXISTING CONDITIONS

### ROADWAY NETWORK

To assess the potential traffic impacts associated with the development of the project, nine key intersections were identified that would most likely be affected by the project-generated traffic (see Figure 5-1). These include six signalized and three unsignalized intersections. The signalized intersections are:

- Grand Avenue and 69th Street;
- Borden Avenue/Westbound LIE Service Road and 69th Street;
- Borden Avenue/Eastbound LIE Service Road and 69th Street;
- Grand Avenue and 72nd Place;



-  Project Site Boundary
-  Signalized Intersection
-  Unsignalized Intersection



- Grand Avenue and 74th Street/Shopping Center Driveway; and
- 57th Avenue and 74th Street.

The unsignalized intersections are:

- Grand Avenue and 73rd Place;
- Grand Avenue and 74th Street; and
- 57th Avenue and 73rd Place.

Major roadways in the study area are discussed as follows:

- Grand Avenue is a commercial east/west roadway, which extends from Williamsburg, Brooklyn to Elmhurst, Queens. Within the study area Grand Avenue operates with one travel lane and curbside parking in each direction.
- Borden Avenue serves as the eastbound and westbound service road to the Long Island Expressway (LIE). Within the study area Borden Avenue generally operates with three travel lanes in each direction. Curbside parking activity is prohibited on both the north and south sides of Borden Avenue within the study area.
- Fifty-Seventh Avenue is a two-way east/west local street, which operates with a single traffic lane and curbside parking in each direction.
- Sixty-Ninth Street is a two-way north/south roadway, which operates with two traffic lanes in each direction. Within the study area, curbside parking is generally not allowed on 69th Street.
- Seventy-Fourth Street is a two-way north/south roadway, which operates with one traffic lane and curbside parking in each direction.

### TRAFFIC CONDITIONS

Existing traffic volumes were established based on field counts conducted during the school-related morning and afternoon peak periods (i.e., 7-9 AM and 2-4 PM) in May 2008 at the study area intersections. In addition, Automatic Traffic Recorder (ATR) counts were conducted on Grand Avenue, 74th Street and 57th Avenue to supplement the manual turning movement counts. Field inventories of roadway geometry, traffic control, bus stop presence, and parking regulations/activities were also conducted to provide appropriate inputs for the operational analyses. Figures 5-2 and 5-3 show the existing traffic volumes for the AM and PM peak hours, which were determined to take place from 7:30 to 8:30 AM and 2:45 to 3:45 PM, respectively.

In terms of traffic volumes, Borden Avenue eastbound carries the heaviest traffic volumes in the study area, ranging between 850 and 1,745 vehicles per hour (vph) during the two peak hours. Volumes on westbound Borden Avenue range from 900 to 1,230 vph. Sixty-Ninth Street carries two-way volumes between 810 and 1,280 vph during peak hours. Peak hour volumes on Grand Avenue range from 920 to 995 vph, while those on 57th Avenue range from 350 to 980 vph. Seventy-Fourth Street carries between 440 and 545 vph during the peak hours. Other minor streets in the study area carry low traffic volumes (less than 300 vph) during the two peak hours.

### LEVELS OF SERVICE

Table 5-1 and 5-2 present the service conditions for the study area's signalized and unsignalized intersections, respectively. The capacity analysis indicates that most of the study area's intersection approaches operate acceptably—at mid- LOS D or better for the two peak hours with the exception of:

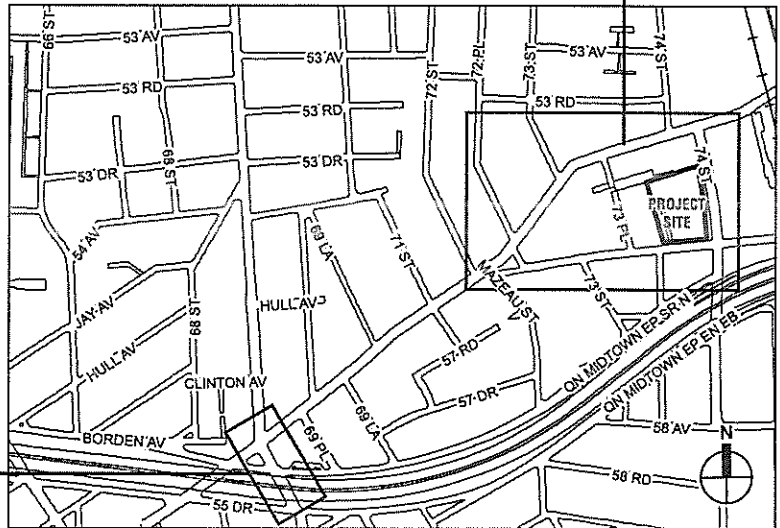
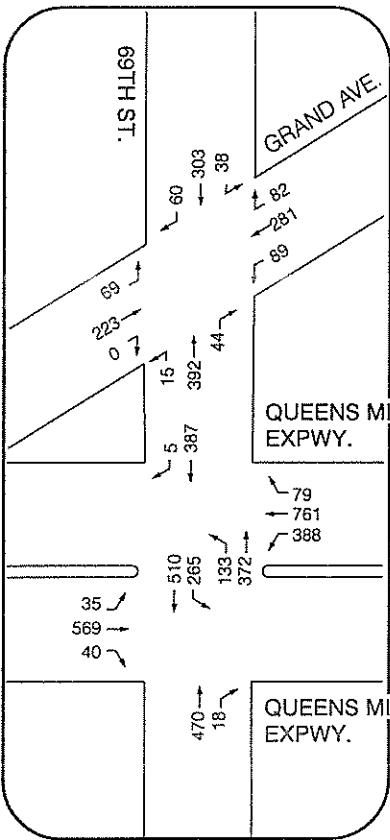
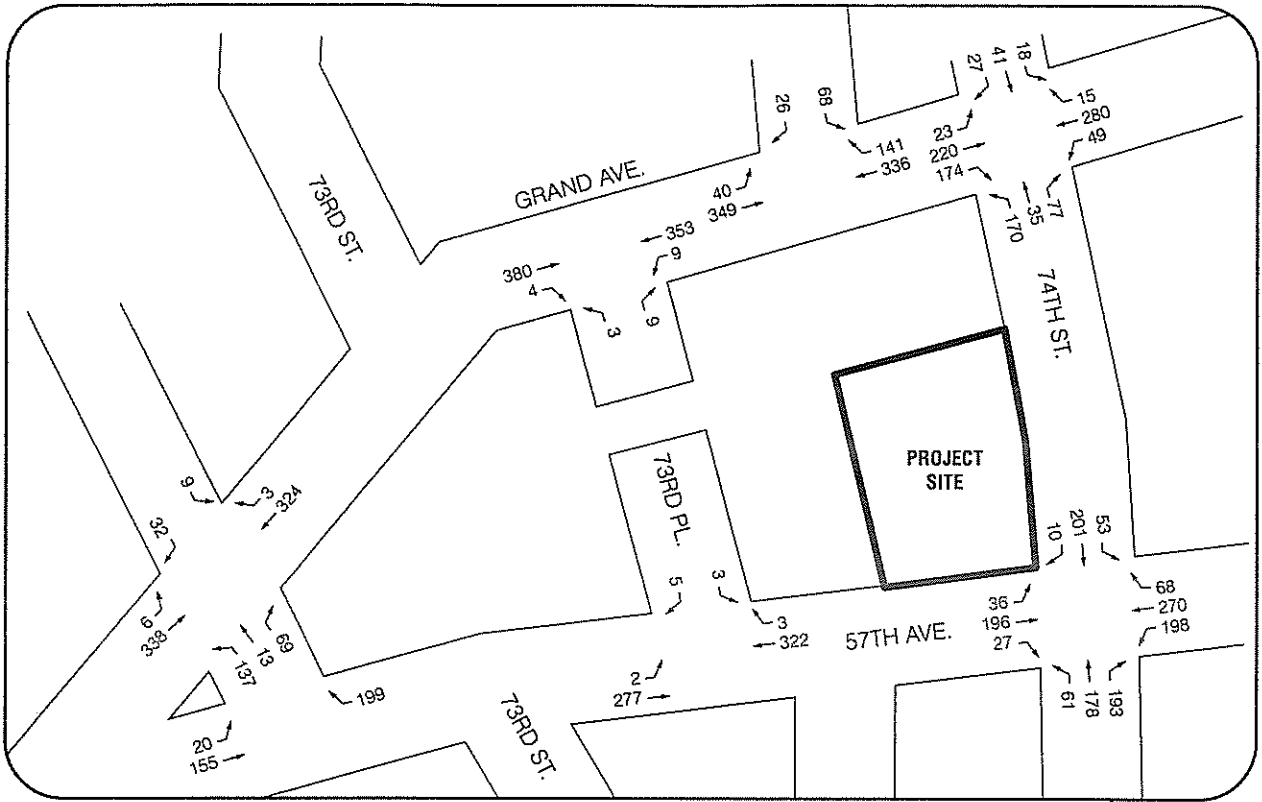
## Maspeth High School

- The eastbound approach of 69th Street at Borden Avenue eastbound, which operates at LOS E during the PM peak hour;
- The northbound approach of 74th Street/Shopping Center Driveway at Grand Avenue which operates at LOS D (delay of 47.6 seconds) during the AM peak hour;
- The westbound approach of 74th Street at 57th Avenue, which operates at LOS E during the AM peak hour; and
- The southbound approach of 74th Street at Grand Avenue (unsignalized intersection) which operates at LOS E during the AM and LOS F during the PM peak hour.

**Table 5-1**  
**2008 Existing Conditions Level of Service Analysis**  
**Signalized Intersections**

Intersection	Peak Hour								
	Weekday AM (7:30-8:30)				Weekday PM				
	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	
<b>Grand Avenue &amp; 69th Street</b>									
Eastbound	LT	0.64	24.8	C	LT	0.59	22.9	C	
	R	0.00	13.3	B	R	0.00	13.4	B	
Westbound	LTR	0.55	20.2	C	LTR	0.36	16.9	B	
Northbound	LT	0.66	25.1	C	LT	0.53	21.6	C	
	R	0.09	15.3	B	R	0.10	15.4	B	
Southbound	LTR	0.74	29.2	C	LTR	0.89	40.4	D	
Intersection			24.4	C	Intersection			26.6	C
<b>Borden Avenue (WB) &amp; 69th Street</b>									
Westbound	LTR	0.86	31.6	C	LTR	0.70	25.4	C	
Northbound	LT	0.49	16.5	B	DefL	0.76	34.4	C	
					T	0.34	14.6	B	
Southbound	TR	0.40	23.6	C	TR	0.44	24.1	C	
Intersection			26.5	C	Intersection			24.9	C
<b>Borden Avenue (EB) &amp; 69th Street</b>									
Eastbound	LTR	0.47	21.5	C	LTR	1.05	62.9	E	
Northbound	TR	0.50	25.1	C	TR	0.53	25.6	C	
Southbound	DefL	0.68	32.2	C		0.57	28.4	C	
Southbound	T	0.70	22.3	C	T	0.57	18.6	B	
Intersection			24.2	C	Intersection			45.6	D
<b>Grand Avenue &amp; 72nd Place</b>									
Eastbound	LT	0.46	9.7	A	LT	0.46	9.6	A	
Westbound	TR	0.36	8.4	A	TR	0.36	8.4	A	
Northbound	L	0.49	34.2	C	L	0.69	42.1	D	
	TR	0.31	30.4	C	TR	0.11	27.0	C	
Southbound	LR	0.40	34.5	C	LR	0.52	38.6	D	
Intersection			16.3	B	Intersection			18.4	B
<b>Grand Ave &amp; 74th Street (Shopping Center Driveway)</b>									
Eastbound	LTR	0.72	21.8	C	LTR	0.87	32.4	C	
Westbound	LTR	0.54	15.9	B	LTR	0.41	13.7	B	
Northbound	LTR	0.85	47.6	D	LTR	0.59	30.7	C	
Southbound	LTR	0.24	22.1	C	LTR	0.43	25.4	C	
Intersection			26.3	C	Intersection			26.6	C
<b>57th Ave &amp; 74th Street</b>									
Eastbound	LTR	0.64	18.8	B	LTR	0.66	18.6	B	
Westbound	LTR	1.05	70.2	E	LTR	0.76	25.1	C	
Northbound	LTR	0.81	24.9	C	LTR	0.68	18.8	B	
Southbound	LTR	0.56	16.7	B	LTR	0.55	17.2	B	
Intersection			37.1	D	Intersection			20.0	B

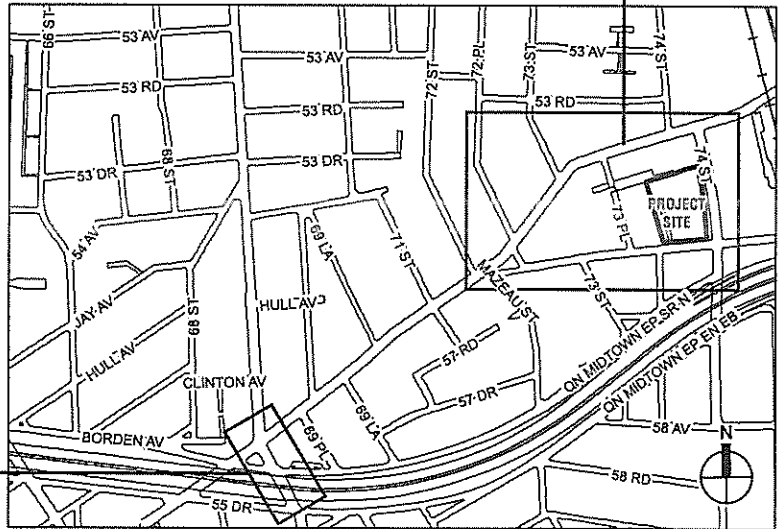
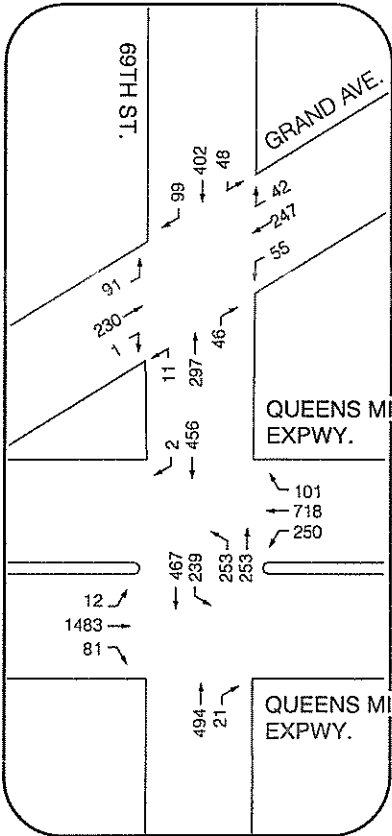
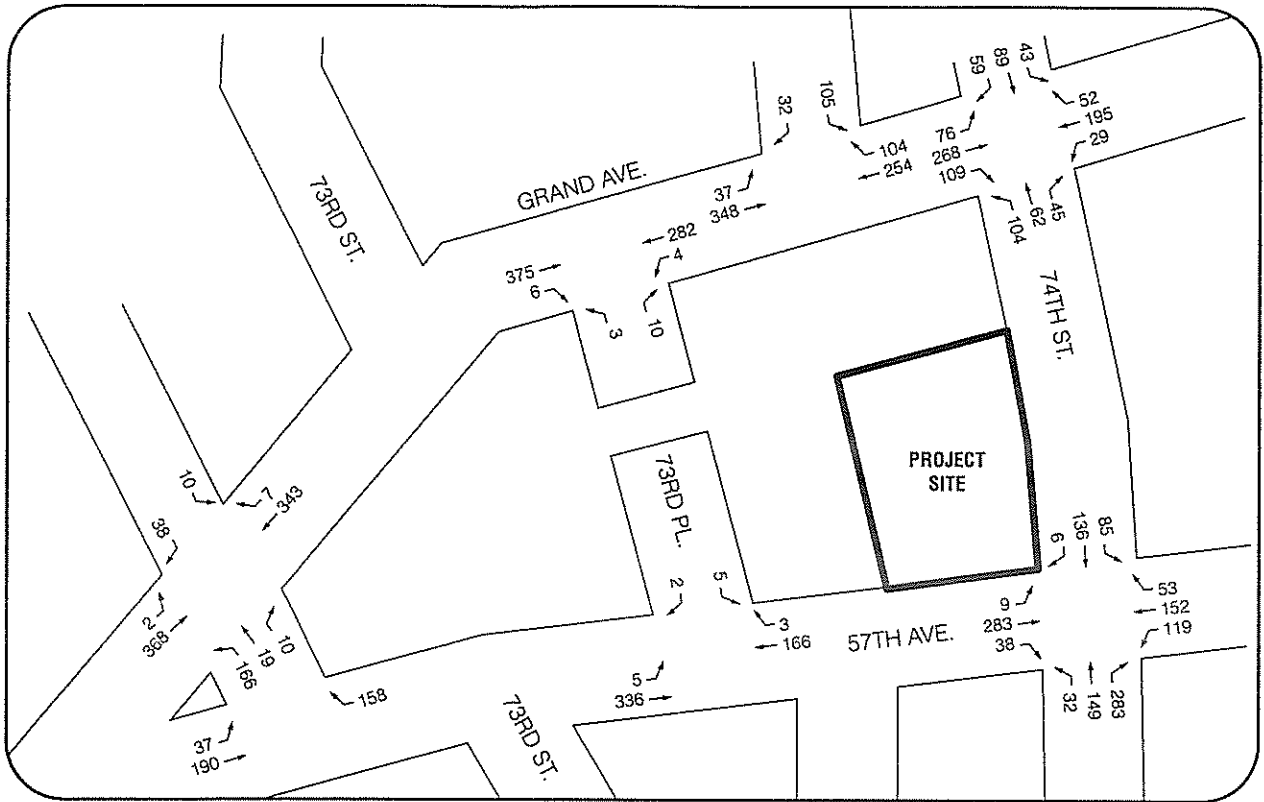
Notes: L = Left Turn, T = Through, R = Right Turn, DefL = Defacto Left Turn; LOS = Level of Service.



NOT TO SCALE

**2008 Existing Traffic Volumes**  
**Weekday AM Peak Hour**  
**(7:30-8:30 AM)**  
 Figure 5-2





NOT TO SCALE

**2008 Existing Traffic Volumes**  
**Weekday PM Peak Hour**  
**(2:45-3:45 PM)**  
 Figure 5-3

**Table 5-2**  
**2008 Existing Conditions Level of Service Analysis**  
**Unsignalized Intersections**

Intersection	Peak Hour							
	Weekday AM				Weekday PM			
	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS
<b>Grand Avenue and 73rd Place</b>								
Westbound	LT	0.01	9.3	A	LT	0.00	9.5	A
Northbound	LR	0.08	17.6	C	LR	0.08	18.6	C
<b>57th Avenue and 73rd Place</b>								
Eastbound	LT	0.00	8.9	A	LT	0.00	7.9	A
Southbound	LR	0.04	14.9	B	LR	0.03	13.1	B
<b>Grand Avenue and 74th Street</b>								
Eastbound	LT	0.08	10.2	B	LT	0.06	9.7	A
Southbound	LR	0.62	49.1	E	LR	0.73	56.1	F
<b>Notes:</b> L = Left Turn, T = Through, R = Right Turn, DefL = Defacto Left Turn; LOS = Level of Service.								

## PARKING

An on-and off-street parking survey was conducted within a quarter-mile mile radius of the project site in May, 2008 to determine the available parking in the study area. Based on the survey, there are approximately 1,176 legal on-street parking spaces (including 1,155 non-metered and 21 metered spaces) within a quarter-mile radius of the project site. Of these, there were approximately 482 spaces (including 465 non-metered and 17 metered) available during the morning period resulting in an overall utilization rate of 59 percent. There are no public off-street parking facilities in the study area.

## D. THE FUTURE WITHOUT THE PROPOSED PROJECT

Future 2012 conditions without the proposed project were estimated by increasing existing traffic levels to reflect expected growth in overall travel through and within the study area. As per the *CEQR* guidelines, a background growth rate of 1.0 percent per year was assumed. There were no notable background projects identified in or near the study area which would generate additional traffic beyond the background growth.

## TRAFFIC CONDITIONS

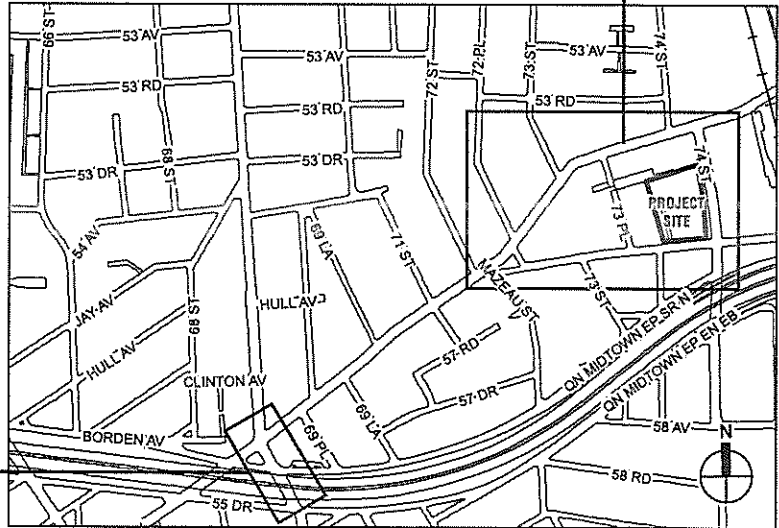
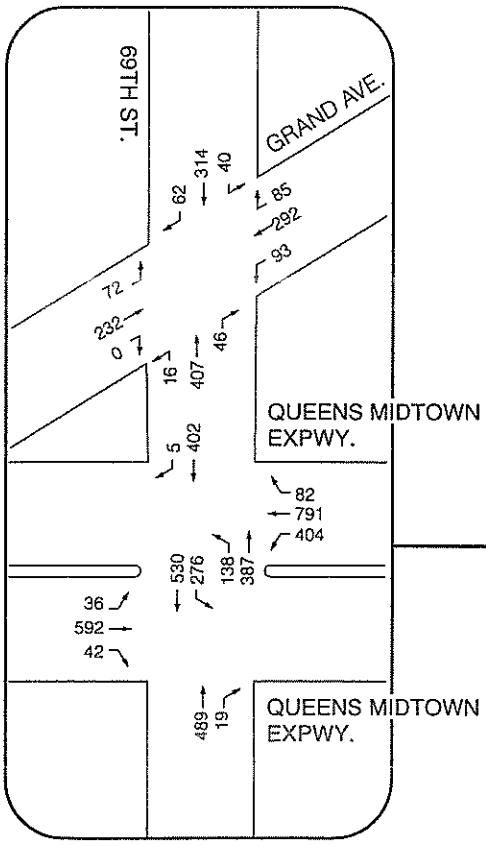
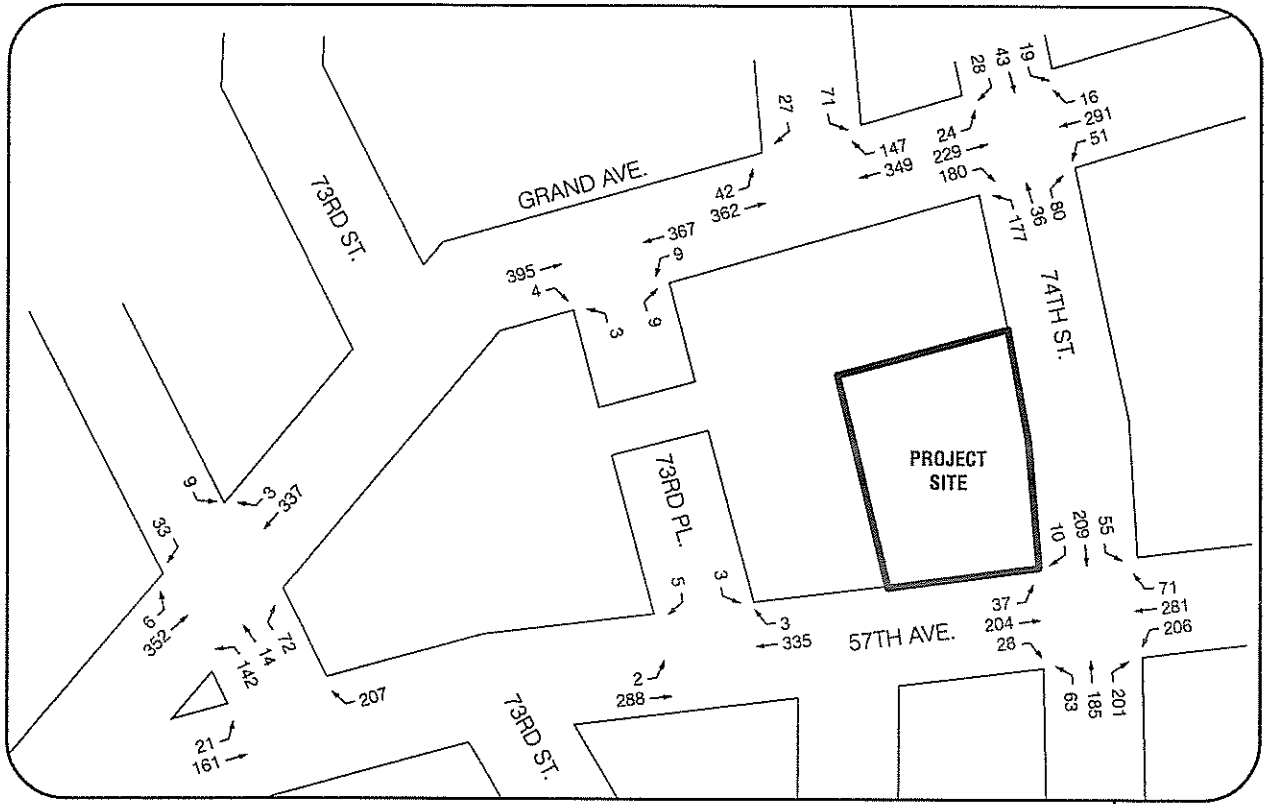
The 2012 No Build traffic volumes are shown in Figures 5-4 and 5-5 for the AM and PM peak hours, respectively. Tables 5-3 and 5-4 present a comparison of Existing and No Build conditions for signalized and unsignalized intersections, respectively. Based on the analysis results, most of the approaches/lane-groups would operate at the same LOS as in the existing conditions with the following notable exceptions:

- The westbound approach of 57th Avenue at 74th Street, which would deteriorate from LOS E to LOS F during the AM peak hour; and
- The southbound shared left and right-turn movement of 74th Street at Grand Avenue (unsignalized intersection), which would deteriorate from LOS E to LOS F during the AM peak hour.

**Table 5-3**  
**2008 Existing and 2012 No Build Conditions Level of Service Analysis—Signalized Intersections**

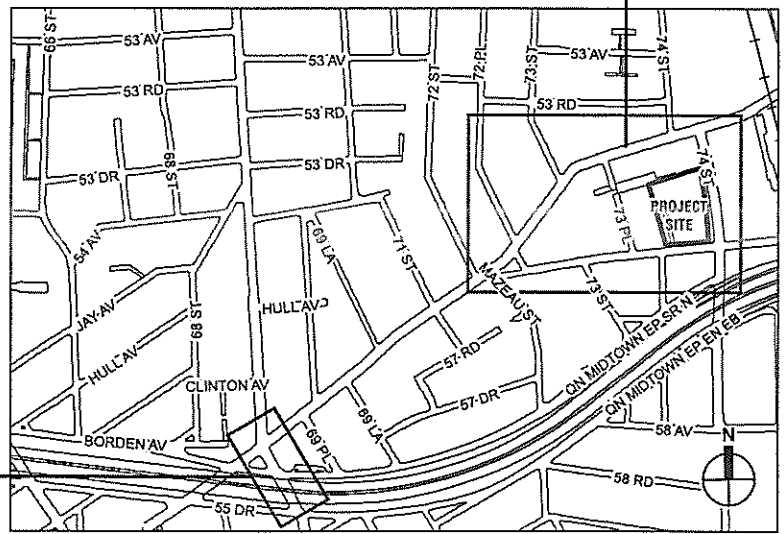
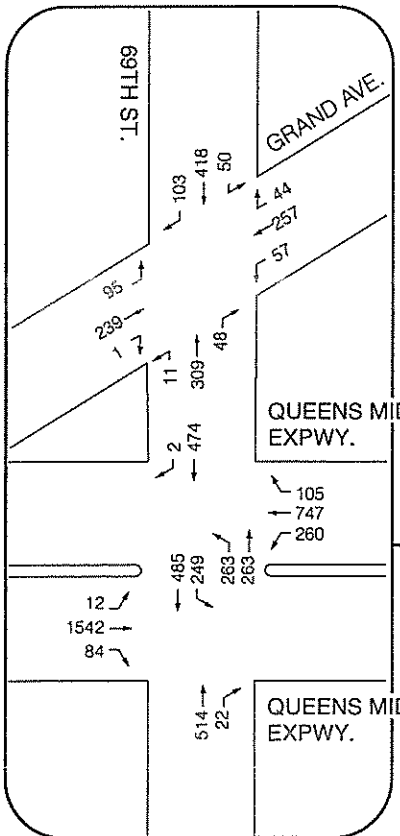
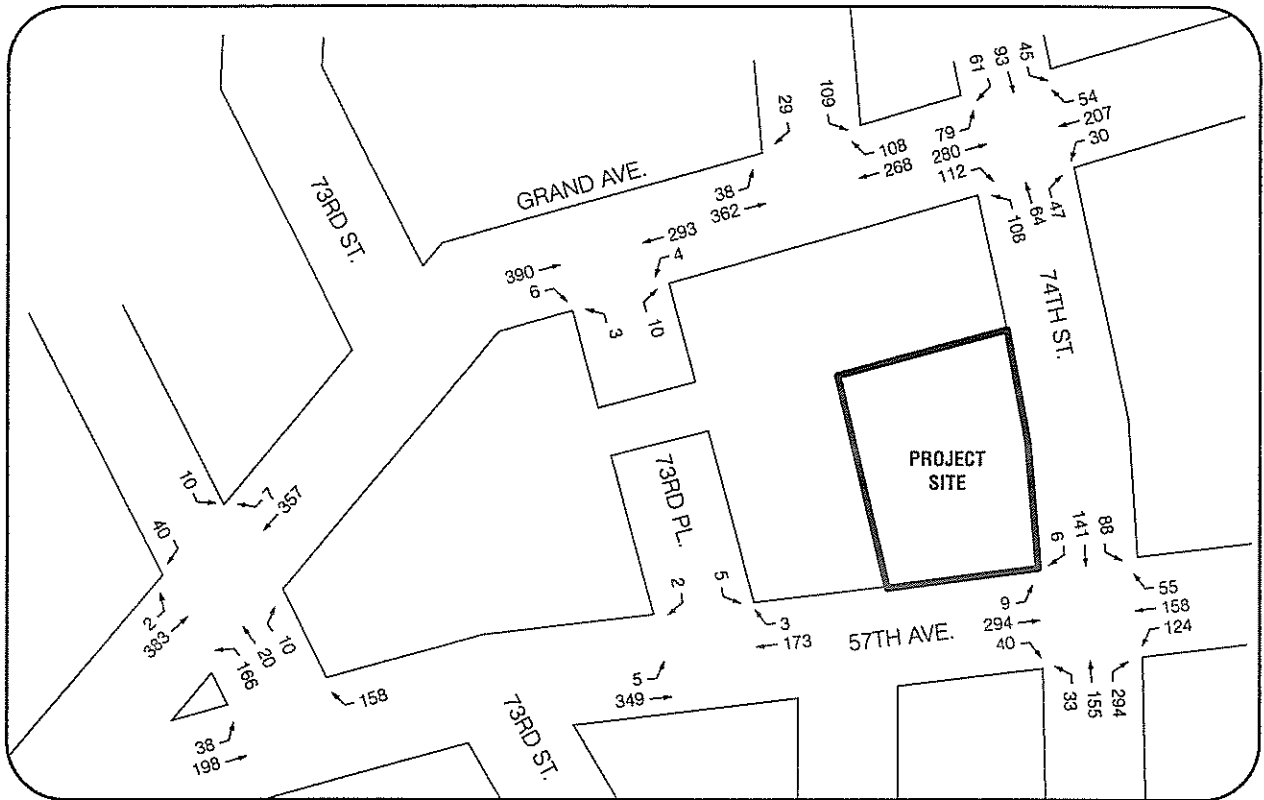
Intersections	PM Peak Hour															
	AM Peak Hour					PM Peak Hour										
	2008 Existing		2012 No Build		2008 Existing		2012 No Build		2008 Existing		2012 No Build					
Lane Group	v/c Ratio	Delay (spv)	LOS	Lane Group	v/c Ratio	Delay (spv)	LOS	Lane Group	v/c Ratio	Delay (spv)	LOS	Lane Group	v/c Ratio	Delay (spv)	LOS	
<b>Grand Avenue &amp; 69th Street</b>																
Eastbound	LT	0.64	24.8	C	LT	0.68	26.5	C	LT	0.59	22.9	C	LT	0.62	23.9	C
	R	0.00	13.3	B	R	0.00	13.3	B	R	0.00	13.4	B	R	0.00	13.4	B
Westbound	LTR	0.55	20.2	C	LTR	0.59	21.0	C	LTR	0.36	16.9	B	LTR	0.37	17.1	B
	LT	0.66	25.1	C	LT	0.69	26.1	C	LT	0.53	21.6	C	LT	0.55	22.0	C
	R	0.09	15.3	B	R	0.09	15.3	B	R	0.10	15.4	B	R	0.10	15.5	B
Southbound	LTR	0.74	29.2	C	LTR	0.79	32.8	C	LTR	0.89	40.4	D	LTR	0.95	51.4	D
	Intersection		24.4	C	Intersection		26.0	C	Intersection		26.6	C	Intersection		30.6	C
<b>Borden Avenue (WB) &amp; 69th Street</b>																
Westbound	LTR	0.86	31.6	C	LTR	0.82	29.3	C	LTR	0.70	25.4	C	LTR	0.73	26.1	C
	LT	0.49	16.5	B	LT	0.52	16.9	B	Defl	0.76	34.4	C	Defl	0.80	39.3	D
									T	0.34	14.6	B	T	0.35	14.8	B
Southbound	TR	0.40	23.6	C	TR	0.42	23.8	C	TR	0.44	24.1	C	TR	0.46	24.4	C
	Intersection		26.5	C	Intersection		25.3	C	Intersection		24.9	C	Intersection		26.0	C
<b>Borden Avenue (EB) &amp; 69th Street</b>																
Eastbound	LTR	0.47	21.5	C	LTR	0.49	21.8	C	LTR	1.05	62.9	E	LTR	1.09	77.2	E
Northbound	TR	0.50	25.1	C	TR	0.53	25.4	C	TR	0.53	25.6	C	TR	0.56	26.0	C
Southbound	Defl	0.68	32.2	C	Defl	0.72	35.0	C	Defl	0.57	28.4	C	Defl	0.59	29.8	C
	T	0.70	22.3	C	T	0.73	23.3	C	T	0.57	18.6	B	T	0.60	19.1	B
	Intersection		24.2	C	Intersection		25.0	C	Intersection		45.6	B	Intersection		53.8	D
<b>Grand Avenue &amp; 72nd Place</b>																
Eastbound	LT	0.46	9.7	A	LT	0.48	10.0	A	LT	0.46	9.6	A	LT	0.48	9.8	A
Westbound	TR	0.36	8.4	A	TR	0.38	8.6	A	TR	0.36	8.4	A	TR	0.38	8.6	A
Northbound	L	0.49	34.2	C	L	0.51	34.7	C	L	0.69	42.1	D	L	0.70	42.9	D
	TR	0.31	30.4	C	TR	0.33	30.7	C	TR	0.11	27.0	C	TR	0.11	27.0	C
Southbound	LR	0.40	34.5	C	LR	0.41	35.2	D	LR	0.52	38.6	D	LR	0.55	40.0	D
	Intersection		16.3	B	Intersection		16.6	B	Intersection		18.4	B	Intersection		18.7	B
<b>Grand Ave &amp; 74th Street (Shopping Center Driveway)</b>																
Eastbound	LTR	0.72	21.8	C	LTR	0.75	23.1	C	LTR	0.87	32.4	C	LTR	0.91	37.4	D
Westbound	LTR	0.54	15.9	B	LTR	0.56	16.5	B	LTR	0.41	13.7	B	LTR	0.44	14.1	B
Northbound	LTR	0.85	47.6	D	LTR	0.89	52.7	D	LTR	0.59	30.7	C	LTR	0.62	32.4	C
Southbound	LTR	0.24	22.1	C	LTR	0.25	22.3	C	LTR	0.43	25.4	C	LTR	0.45	25.9	C
	Intersection		26.3	C	Intersection		28.2	C	Intersection		26.6	C	Intersection		29.2	C
<b>57th Ave &amp; 74th Street</b>																
Eastbound	LTR	0.64	18.8	B	LTR	0.66	19.6	B	LTR	0.66	18.6	B	LTR	0.68	19.5	B
Westbound	LTR	1.05	70.2	E	LTR	1.11	90.2	F	LTR	0.76	25.1	C	LTR	0.81	29.2	C
Northbound	LTR	0.81	24.9	C	LTR	0.84	27.1	C	LTR	0.68	18.8	B	LTR	0.71	19.7	B
Southbound	LTR	0.56	16.7	B	LTR	0.59	17.4	B	LTR	0.55	17.2	B	LTR	0.59	18.3	B
	Intersection		37.1	D	Intersection		44.6	D	Intersection		20.0	B	Intersection		21.6	C

Notes: L = Left Turn, T = Through, R = Right Turn, LOS = Level of Service.



NOT TO SCALE

**2012 No Build Traffic Volumes  
 Weekday AM Peak Hour  
 (7:30-8:30 AM)  
 Figure 5-4**



NOT TO SCALE

**2012 No Build Traffic Volumes**  
**Weekday PM Peak Hour**  
**(2:45-3:45 PM)**  
 Figure 5-5

**Table 5-4**  
**2008 Existing and 2012 No Build Conditions Level of Service Analysis—Unsignalized Intersections**

Intersections	PM Peak Hour															
	AM Peak Hour						PM Peak Hour									
	2008 Existing		2012 No Build		2008 Existing		2012 No Build		2008 Existing		2012 No Build					
Lane Group	v/c Ratio	Delay (spv)	LOS	Lane Group	v/c Ratio	Delay (spv)	LOS	Lane Group	v/c Ratio	Delay (spv)	LOS	Lane Group	v/c Ratio	Delay (spv)	LOS	
<b>Grand Avenue and 73rd Place</b>																
Westbound	LT	0.01	9.3	A	LT	0.01	9.4	A	LT	0.00	9.5	A	LT	0.01	9.6	A
Northbound	LR	0.08	17.6	C	LR	0.09	18.2	C	LR	0.08	18.6	C	LR	0.08	19.4	C
<b>57th Avenue and 73rd Place</b>																
Eastbound	LT	0.00	8.9	A	LT	0.00	8.9	A	LT	0.00	7.9	A	LT	0.00	7.9	A
Southbound	LR	0.04	14.9	B	LR	0.04	15.3	C	LR	0.03	13.1	B	LR	0.03	13.4	B
<b>Grand Avenue and 74th Street</b>																
Eastbound	LT	0.08	10.2	B	LT	0.08	10.4	B	LT	0.06	9.7	A	LT	0.06	9.9	A
Southbound	LR	0.62	49.1	E	LR	0.70	60.9	F	LR	0.73	56.1	F	LR	0.81	70.9	F

Notes: L = Left Turn, T = Through, R = Right Turn, LOS = Level of Service.

**PARKING**

The study area’s overall on-street parking utilization is assumed to experience the same 1.0 percent background growth per year as projected for the traffic conditions in the study area. Therefore, in the 2012 No Build conditions, the overall on-street parking utilization rate in the study area would increase to 61 percent, with 454 available on-street spaces.

**E. PROBABLE IMPACTS OF THE PROPOSED PROJECT**

**PROJECT TRIP GENERATION AND MODAL SPLIT**

As discussed in Chapter 1, “Project Description,” the proposed school building would house two high school organizations with a total enrollment of approximately 1,120 students. Modal split estimates for students were determined based on the information presented in the Environmental Studies for other school projects with comparable characteristics, New York Metropolitan Transportation Council (NYMTC) data for Queens, professional judgment, and existing travel characteristics in the study area.

To accurately estimate the number of student trips on a typical day, a 10 percent absentee rate was assumed, yielding a total of 1,007 students. In addition, it is estimated that approximately 90 percent or about 906 of the students would arrive and depart during the morning and afternoon peak hours. The trip generation and modal splits for the proposed school are presented in Table 5-5.

**Table 5-5  
Trip Generation  
High School Students**

Travel Mode	Students		
	Percent	Person Trips	Vehicle Trips
<b>AM PEAK HOUR</b>			
Automobile (drop-offs/pick-ups)*	15%	136	122
Automobile (drive)	5%	45	41
School Bus/Van*	0%	0	—
Public Transit	50%	453	—
Walk	30%	272	—
<b>PM PEAK HOUR</b>			
Automobile (drop-offs/pick-ups)*	15%	136	122
Automobile (drive)	5%	45	41
School Bus/Van*	0%	0	—
Public Transit	50%	453	—
Walk	30%	272	—
<b>Notes:</b>			
* Both inbound and outbound vehicle trips takes place during the same peak hour			
Student Vehicle Occupancy = 1.1			
School Bus/Van Occupancy = 17			

**TEACHERS AND ADMINISTRATIVE STAFF**

The school facility would be staffed by approximately 85 teachers and administrative staff. The trip generation and modal splits for the teachers and administrative staff are presented in Table 5-6.



**Table 5-6**  
**Trip Generation**  
**Teachers and Administrative Staff**

Travel Mode (1)	Staff		
	Percent	Person Trips	Vehicle Trips
<b>AM PEAK HOUR</b>			
Automobile (Drive)	64%	54	49
Taxi	1%	1	1
Subway	12%	10	—
Local Bus	9%	8	—
Walk	14%	12	—
<b>PM PEAK HOUR</b>			
Automobile (Drive)	64%	54	49
Taxi	1%	1	1
Subway	12%	10	—
Local Bus	9%	8	—
Walk	14%	12	—
Notes: Staff Vehicle Occupancy = 1.1			
(1) Modal splits based on Reverse-Journey-To-Work (RJTW) information from the 2000 U.S. Census Data for Census Tracts 493.01, 493.02, 495, 497, 499, 507, 511, 513, 517, 667, and 669.			

### PROJECT VEHICLE ASSIGNMENT

Project-generated traffic was assigned to the study area network based on the local travel patterns (the most likely approach paths to and from the project site). Project-generated traffic entering the study area was distributed in the following manner: 20 percent from the north via 69th and 74th Streets; 30 percent from the northwest and west via Grand and 57th Avenues; 20 percent from the south east via Borden Avenue eastbound and Grand Avenue; and 30 percent from the south via 69th and 74th Streets. All the student drop-offs and pick-ups were routed to or across the street from the school's main entrance on 74th Street between Grand and 57th Avenues. Also, it was conservatively assumed that all the students and staff driving to school would seek parking on 74th Street.

### TRAFFIC CONDITIONS

Figures 5-6 and 5-7 show the total project-generated traffic volumes on the streets surrounding the site in the AM and PM peak hours, respectively. Figures 5-8 and 5-9 show the estimated Build condition volumes for the AM and PM peak hours, respectively. Tables 5-7 and 5-8 present a comparison of the No Build and Build conditions for signalized and unsignalized intersections.

### IMPACT CRITERIA

According to the criteria presented in the *CEQR Technical Manual*, impacts (for both signalized and unsignalized intersections) are considered significant and require examination of improvements if they result in an increase of 5 or more seconds of delay in a lane group over No Build levels beyond mid-LOS D. For No Build LOS E, a 4-second increase in delay is considered significant. For No Build LOS F, a 3-second increase in delay is considered significant. Also, if the No Build LOS F condition already has a No Build delay in excess of 120 seconds, an increase of 1.0 or more seconds of delay is considered significant, unless the proposed project generates fewer than five vehicle trips through that intersection in the peak hour. Impacts are also considered significant if levels of service decrease from acceptable LOS A, B, or C in the No Build condition to marginally unacceptable LOS D, or unacceptable LOS E

## Maspeth High School

or F in the future Build condition. In the event of such impacts, potential improvement measures will be examined.

In addition, the *CEQR Technical Manual* states that at an unsignalized intersection, for the minor approach to trigger significant impacts, 90 passenger car equivalents (PCEs) must be identified in the future build condition in any peak hour.

The street capacities at the majority of the study area intersections would be sufficient to accommodate the project-generated traffic increases. However, based on CEQR standards, the proposed project could result in significant adverse impacts at the following intersections/approaches during the peak periods analyzed:

### *GRAND AVENUE AND 69TH STREET*

- The southbound approach during the AM and PM peak hours.

### *GRAND AVENUE AND 72ND PLACE*

- The northbound left-turn movement during the PM peak hour.

### *GRAND AVENUE AND 74TH STREET (SHOPPING CENTER DRIVEWAY)*

- The eastbound and northbound approaches during the AM and PM peak hours.

### *57TH AVENUE AND 74TH STREET*

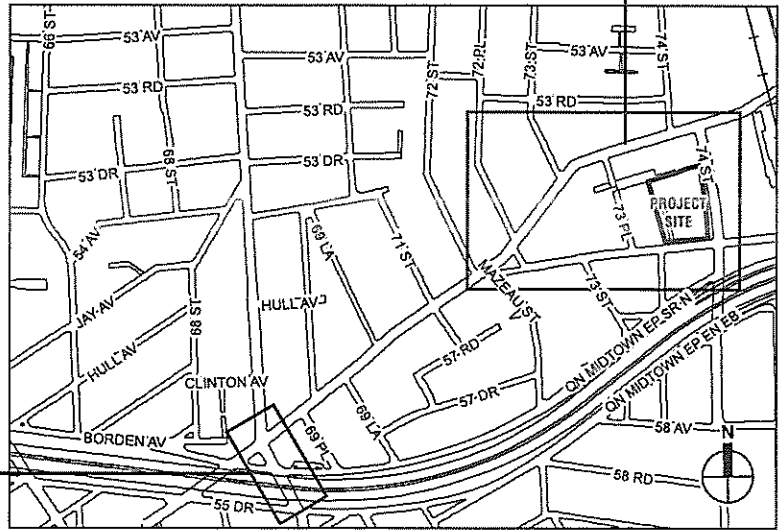
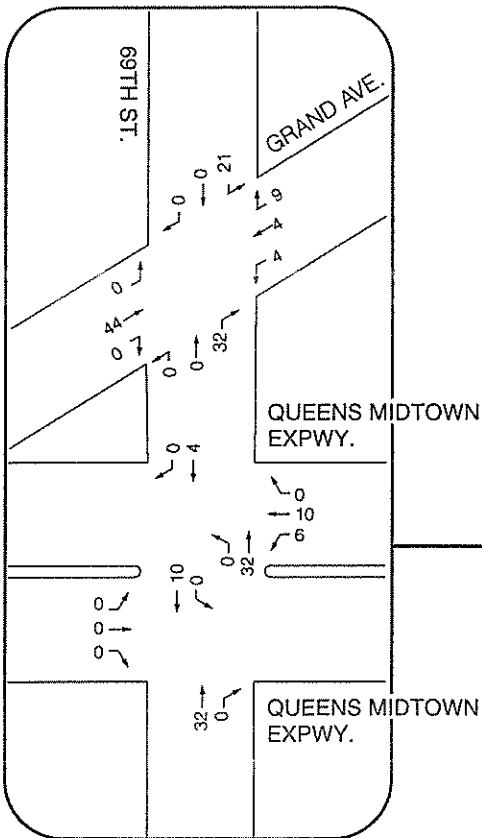
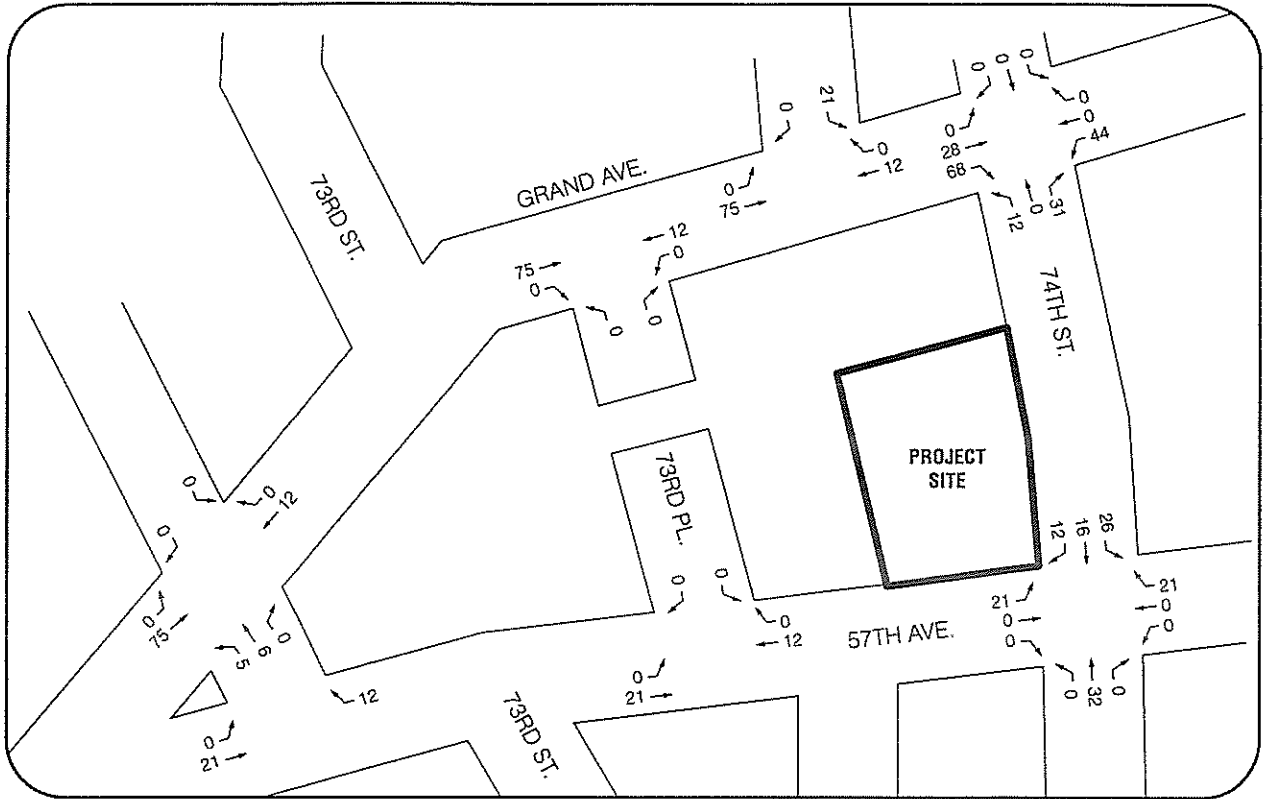
- The westbound approach during the AM, and the southbound approach during the PM peak hours.

### *GRAND AVENUE AND 74TH STREET*

- The southbound approach during the AM and PM peak hours (unsignalized intersection).

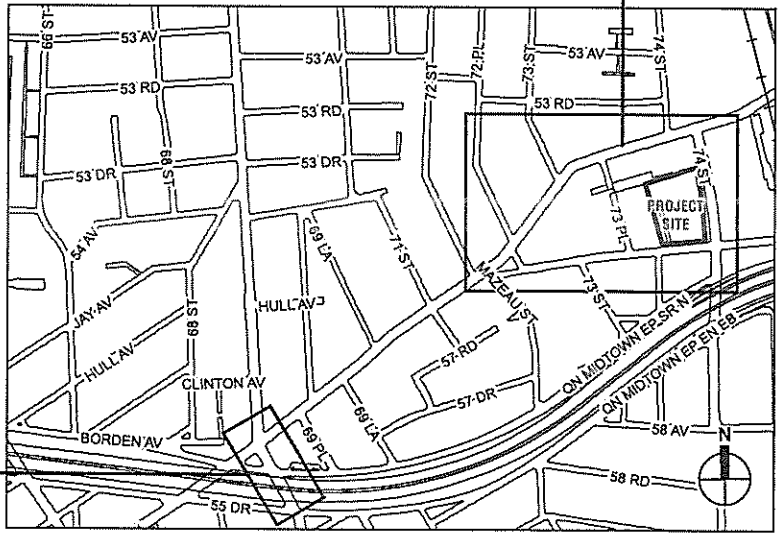
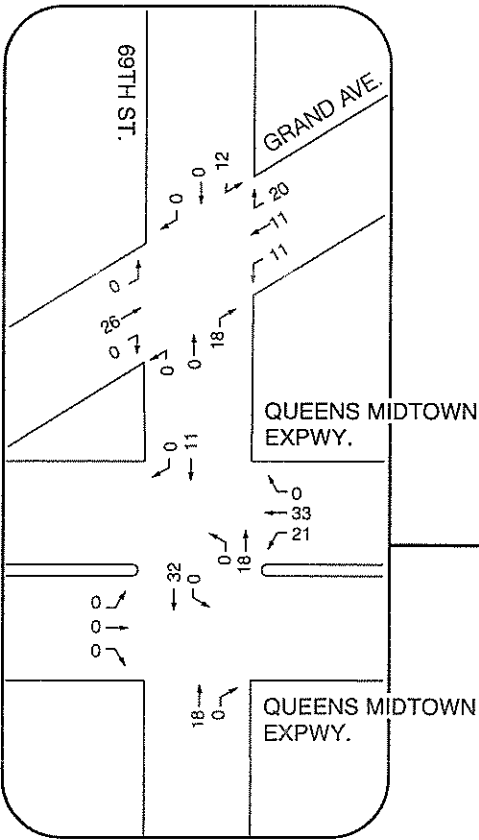
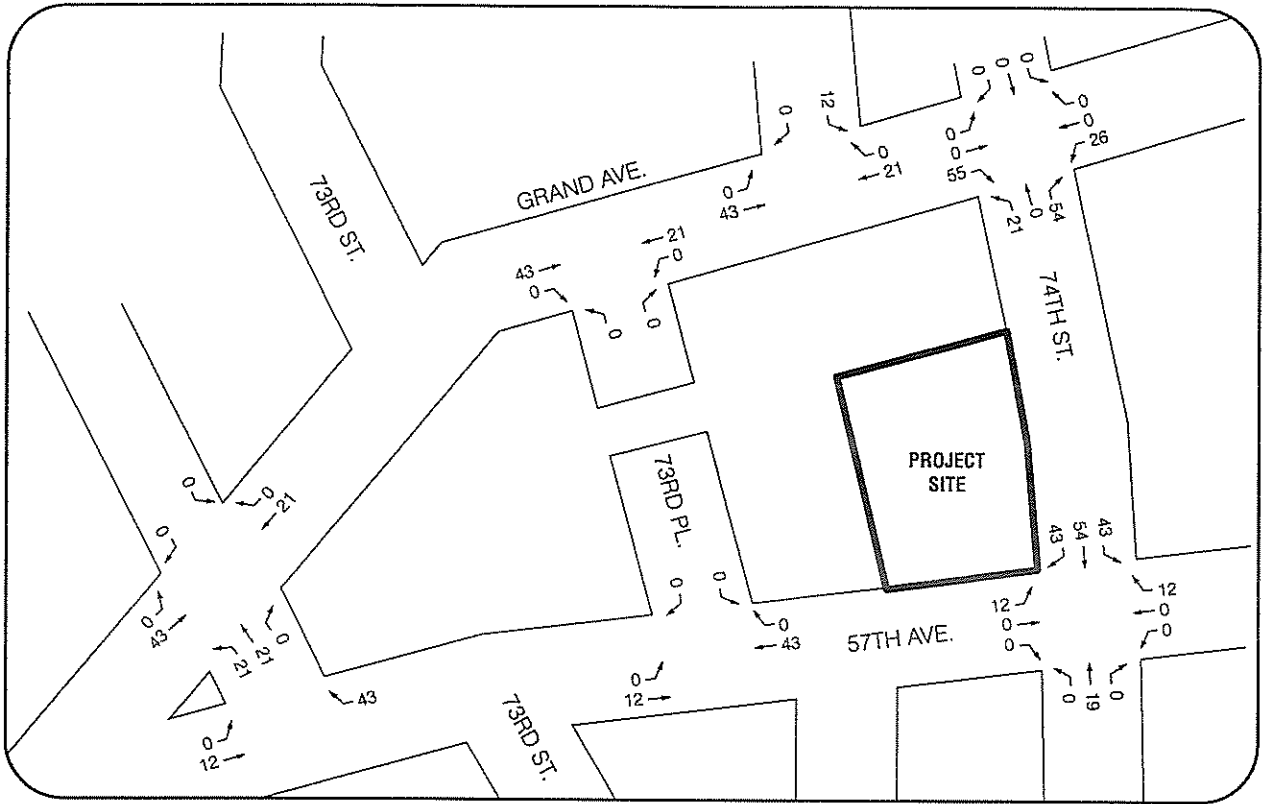
## **PARKING**

The proposed school would not provide any on-site parking spaces, and would generate a demand of approximately 90 parking spaces by faculty/staff and students commuting by auto. Since the study area's on-street parking utilization in the No Build conditions is approximately 61 percent, there would be enough capacity available to accommodate the project generated parking demand. With the project-generated parking demand, the on-street parking utilization rate in the study area would increase to approximately 69 percent in the 2012 Build condition. Therefore, the proposed project would not result in significant adverse impact to the supply-and-demand of on-street parking in the study area.



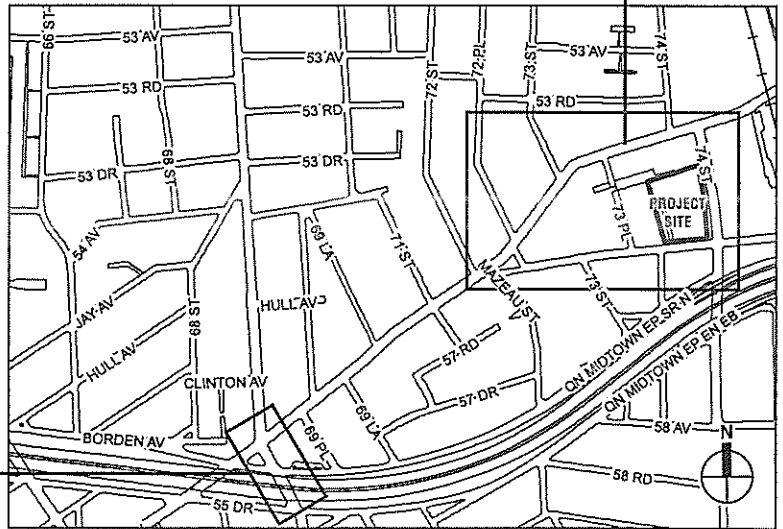
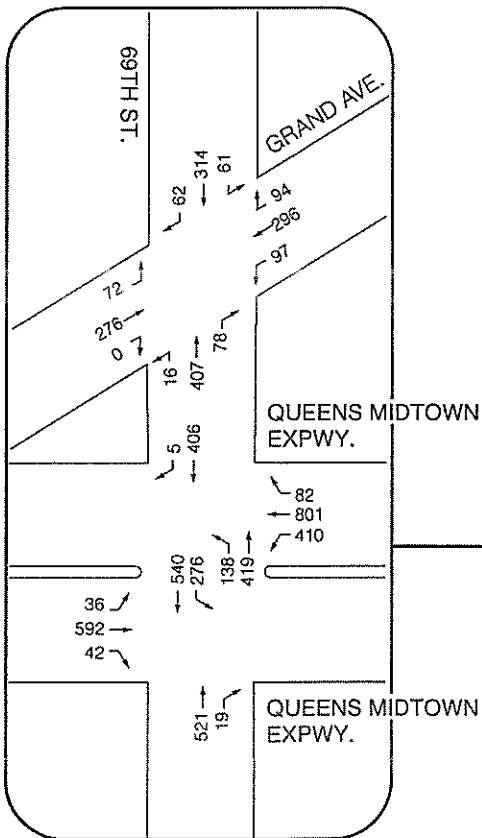
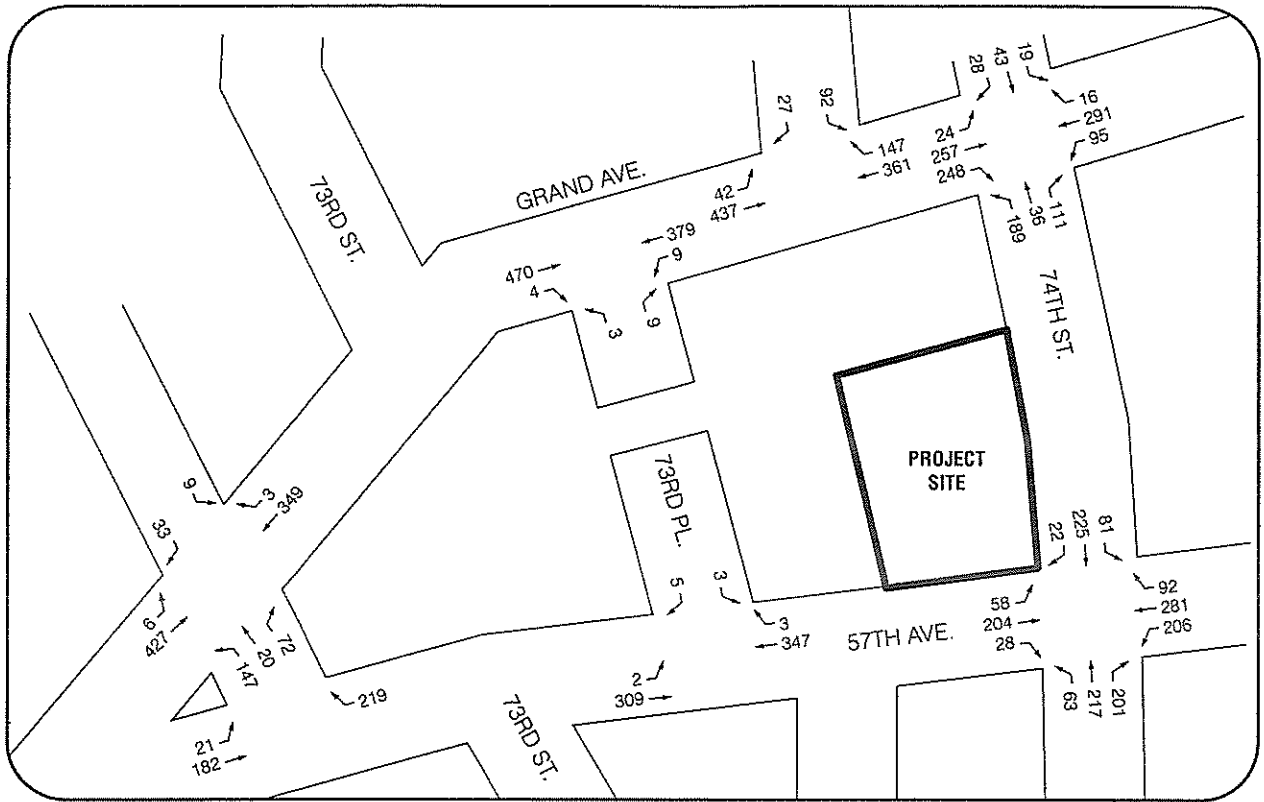
NOT TO SCALE

**2012 Project Generated Traffic Volumes**  
**Weekday AM Peak Hour**  
**(7:30-8:30 AM)**  
 Figure 5-6



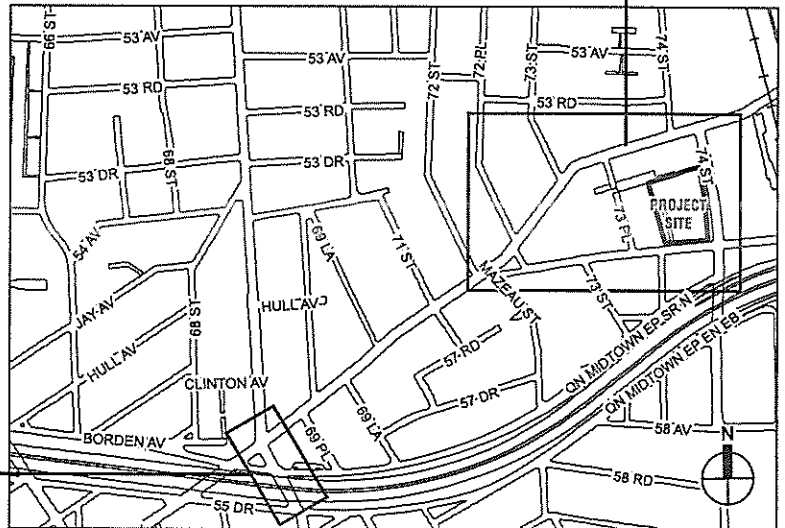
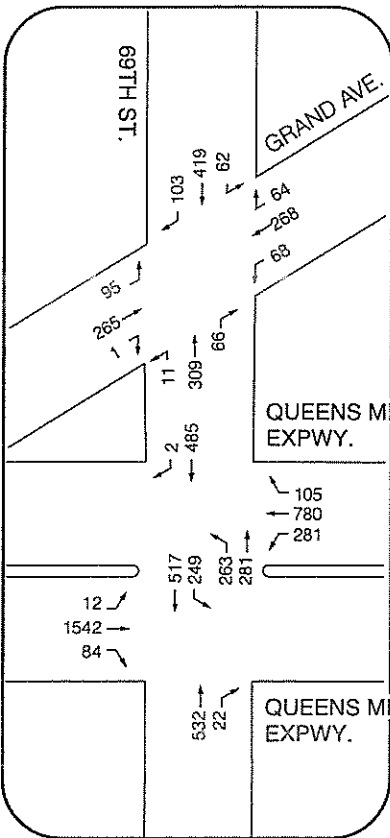
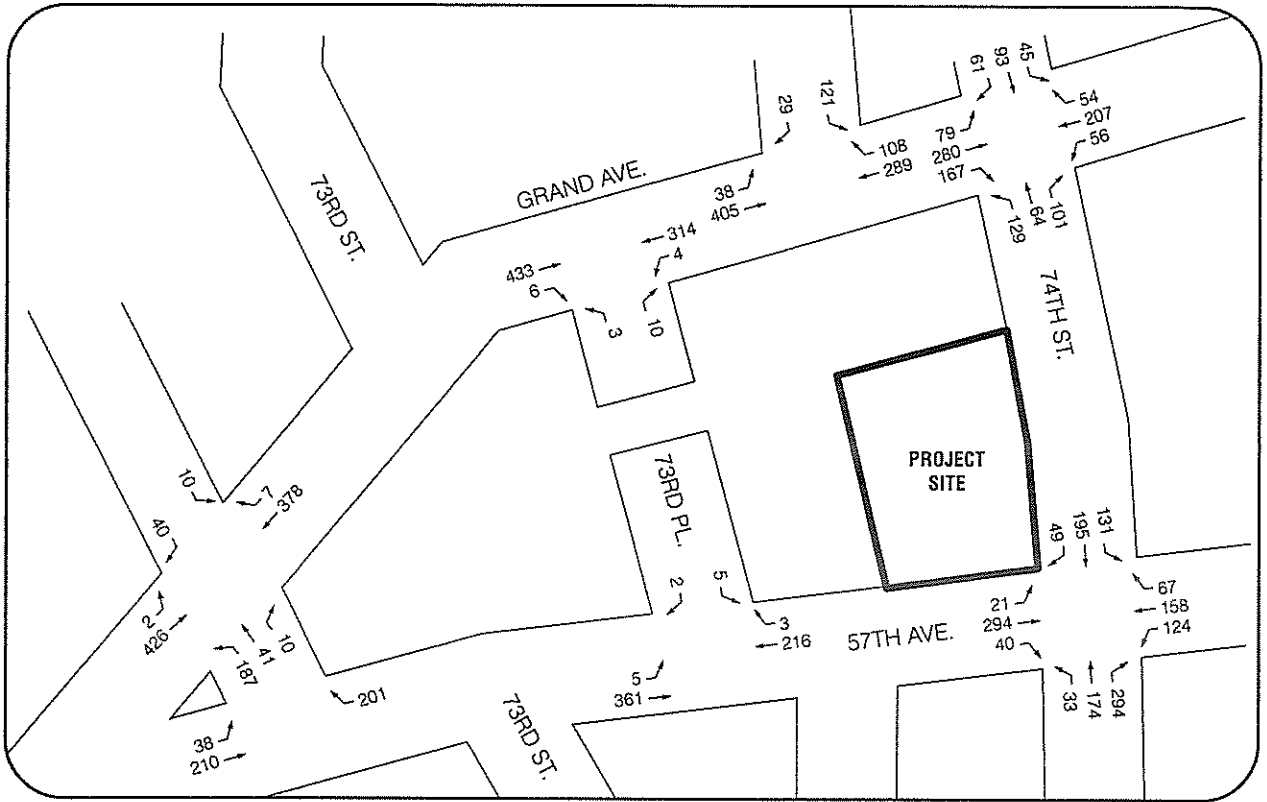
NOT TO SCALE

**2012 Project Generated Traffic Volumes**  
**Weekday PM Peak Hour**  
**(2:45-3:45 PM)**  
 Figure 5-7



NOT TO SCALE

**2012 Build Traffic Volumes**  
**Weekday AM Peak Hour**  
**(7:30-8:30 AM)**  
 Figure 5-8



NOT TO SCALE

**2012 Build Traffic Volumes**  
**Weekday PM Peak Hour**  
**(2:45-3:45 PM)**  
 Figure 5-9

Table 5-7  
2012 No Build and Build Conditions Level of Service Analysis—Signalized Intersections

Intersections	AM Peak Hour						PM Peak Hour					
	2012 No Build			2012 Build			2012 No Build			2012 Build		
	Lane Group	v/c Ratio	Delay (spv)	LOS	Lane Group	v/c Ratio	Delay (spv)	LOS	Lane Group	v/c Ratio	Delay (spv)	LOS
<b>Grand Avenue &amp; 69th Street</b>												
Eastbound	LT	0.68	26.5	C	LT	0.77	31.1	C	LT	0.62	23.9	C
	R	0.00	13.3	B	R	0.00	13.4	B	R	0.00	13.4	B
Westbound	LTR	0.59	21.0	C	LTR	0.65	22.7	C	LTR	0.37	17.1	B
Northbound	LT	0.69	26.1	C	LT	0.69	26.1	C	LT	0.55	22.0	C
	R	0.09	15.3	B	R	0.15	16.0	B	R	0.10	15.5	B
Southbound	LTR	0.79	32.8	C	LTR	0.99	64.8	E +	LTR	0.95	51.4	D
	Intersection		26.0	C	Intersection		34.9	C	Intersection		30.6	C
<b>WB Borden Avenue &amp; 69th Street</b>												
Westbound	LTR	0.82	29.3	C	LTR	0.83	29.7	C	LTR	0.73	26.1	C
Northbound	LT	0.52	16.9	B	LT	0.55	17.4	B	Defl	0.80	39.3	D
					T	0.35	14.8	B	T	0.38	15.1	B
Southbound	TR	0.42	23.8	C	TR	0.42	23.9	C	TR	0.46	24.4	C
	Intersection		25.3	C	Intersection		25.6	C	Intersection		26.0	C
<b>EB Borden Avenue &amp; 69th Street</b>												
Eastbound	LTR	0.49	21.8	C	LTR	0.49	21.8	C	LTR	1.09	77.2	E
Northbound	TR	0.53	25.4	C	TR	0.56	26.0	C	TR	0.58	26.0	C
Southbound	Defl	0.72	35.0	C	Defl	0.75	37.5	D	Defl	0.59	29.8	C
	T	0.73	23.3	C	T	0.74	23.9	C	T	0.60	19.1	B
	Intersection		25.0	C	Intersection		25.7	C	Intersection		53.8	D
<b>Grand Avenue &amp; 72nd Place</b>												
Eastbound	LT	0.48	10.0	A	LT	0.58	11.7	B	LT	0.48	9.8	A
Westbound	TR	0.38	8.6	A	TR	0.39	8.7	A	TR	0.38	8.6	A
Northbound	L	0.51	34.7	C	L	0.53	35.2	D	L	0.70	42.9	D
					TR	0.36	31.4	C	TR	0.11	27.0	C
Southbound	LR	0.41	35.2	D	LR	0.43	35.9	D	LR	0.55	40.0	D
	Intersection		16.6	B	Intersection		17.1	B	Intersection		18.7	B
<b>Grand Ave &amp; 74th Street (Shopping Center Driveway)</b>												
Eastbound	LTR	0.75	23.1	C	LTR	1.00	56.1	E +	LTR	0.94	37.4	D
Westbound	LTR	0.56	16.5	B	LTR	0.77	25.1	C	LTR	0.44	14.1	B
Northbound	LTR	0.89	52.7	D	LTR	1.21	148.0	F +	LTR	0.62	32.4	C
Southbound	LTR	0.25	22.3	C	LTR	0.28	22.9	C	LTR	0.45	25.9	C
	Intersection		28.2	C	Intersection		66.6	E	Intersection		29.2	C
<b>57th Ave &amp; 74th Street</b>												
Eastbound	LTR	0.66	19.6	B	LTR	0.79	26.3	C	LTR	0.68	19.5	B
Westbound	LTR	1.11	90.2	F	LTR	1.18	115.8	F +	LTR	0.81	29.2	C
Northbound	LTR	0.84	27.1	C	LTR	0.90	33.9	C	LTR	0.71	19.7	B
Southbound	LTR	0.59	17.4	B	LTR	0.80	27.9	C	LTR	0.59	18.3	B
	Intersection		44.6	D	Intersection		56.9	E	Intersection		21.6	C

Notes: + Implies significant traffic impact.



2012 No Build and Build Conditions Level of Service Analysis—Unsignalized Intersections

Table 5-8

Intersections	AM Peak Hour				PM Peak Hour											
	2012 No Build		2012 Build		2012 No Build		2012 Build									
	Lane Group	v/c Ratio	Delay (spv)	LOS	Lane Group	v/c Ratio	Delay (spv)	LOS								
<b>Grand Avenue and 73rd Place</b>																
Westbound	LT	0.01	9.4	A	LT	0.02	10.4	B	LT	0.01	9.6	A	LT	0.01	10.3	B
Northbound	LR	0.09	18.2	C	LR	0.12	23.2	C	LR	0.08	19.4	C	LR	0.11	23.5	C
<b>57th Avenue and 73rd Place</b>																
Eastbound	LT	0.00	8.9	A	LT	0.00	9.5	A	LT	0.00	7.9	A	LT	0.01	8.4	A
Southbound	LR	0.04	15.3	C	LR	0.05	17.8	C	LR	0.03	13.4	B	LR	0.04	15.8	C
<b>Grand Avenue and 74th Street</b>																
Eastbound	LT	0.08	10.4	B	LT	0.08	10.5	B	LT	0.06	9.9	A	LT	0.07	10.0+	B
Southbound	LR	0.70	60.9	F	LR	1.03	140.5	F +	LR	0.81	70.9	F	LR	1.00	121.4	F +

Notes: L = Left Turn, T = Through, R = Right Turn, LOS = Level of Service.

+ Implies significant traffic impact.

## **F. MITIGATION**

As discussed under “Probable Impacts of the Proposed Project,” a number of study area intersections would experience significant adverse traffic impacts as a result of project-generated traffic. Table 5-9 summarizes the mitigation measures recommended as part of the proposed project. With these measures in place, all of the impacted intersection approaches/lane groups would operate at the same or at better service conditions than the No Build conditions. Tables 5-10 and 5-11 compare the LOS conditions for the No Build, Build, and Build with Mitigation conditions for these intersections. The specific improvement measures for each intersection approach/lane group are discussed in detail as follows:

### **GRAND AVENUE AND 69TH STREET**

The impact at the southbound approach during the AM and PM peak hours could be mitigated by shifting 3 seconds of green time from the eastbound/westbound phase to the northbound/southbound phase.

### **GRAND AVENUE AND 72ND PLACE**

The impact at the northbound left turn movement during the PM peak hour could be mitigated by shifting 1 second of green time from the eastbound/westbound phase to the northbound/southbound phase.

### **GRAND AVENUE AND 74TH STREET (SIGNALIZED)**

Parking is currently permitted on the south curb of the eastbound approach on Grand Avenue and on the east curb of the northbound approach on 74th Street. The impacts at the eastbound and northbound approaches during the AM and PM peak hours could be mitigated by prohibiting parking on these approaches for approximately 150 feet and restriping both approaches as follows:

- Restripe the eastbound approach to provide one left-through and one right turn lane, each 12 feet wide.
- Restripe the northbound approach to provide one 12-foot left-through lane and one 12-foot right turn lane.

In addition, mitigation would include shifting 3 seconds of green time from the eastbound/westbound phase to the northbound/southbound phase during the AM peak hour.

### **57TH AVENUE AND 74TH STREET:**

The impact at the westbound approach during the AM peak hour could be mitigated by prohibiting parking for 150 feet along the north curb and moving the centerline 2 feet south to create a 13½ foot-wide shared left, through and right-turn lane, and by shifting one second of green time from the northbound/southbound phase to the eastbound/westbound phase. The impact at the southbound approach during the PM peak period could be mitigated by implementing the measures identified for the AM peak hour, and by shifting 2 seconds green time from the eastbound/westbound phase to the northbound/southbound phase.

**GRAND AVENUE AND 74TH STREET (UNSIGNALIZED):**

The impact at the southbound approach during the AM and PM peak hours could be mitigated by installing a new traffic signal (see Table 5-9).

**Table 5-9  
Recommended Mitigation Measures**

Intersection	Mitigation Measures							
	AM Peak Hour				PM Peak Hour			
Grand Avenue & 69th Street	Shift 3 seconds of green time from the EB/WB phase to the NB/SB phase.				Shift 3 seconds of green time from the EB/WB phase to the NB/SB phase.			
Grand Avenue & 72nd Place	None required				Shift 1 second of green time from the EB/WB phase to the NB/SB phase.			
Grand Avenue & 74th Street (Signalized)	Prohibit parking for 150 feet on the EB approach and restripe for one left-through and one right turn lane, each 12 feet wide. Prohibit parking for 150 feet on the NB approach and restripe to provide on 12-foot-wide left-through lane and one 12-foot-wide right-turn lane. Shift 3 seconds green time from the eastbound/westbound phase to the northbound/southbound phase.				Prohibit parking for 150 feet on the EB approach and restripe for one left-through and one right turn lane, each 12 feet wide. Prohibit parking for 150 feet on the NB approach and restripe to provide on 12-foot-wide left-through lane and one 12-foot-wide right turn lane.			
57th Avenue & 74th Street	Prohibit parking for 150 feet on the WB approach and move the centerline 2 feet south to create a 13.5-foot wide left-thru-right lane. Shift one second green time from the NB/SB phase to the EB/WB phase.				Prohibit parking for 150 feet on the WB approach and move the centerline 2 feet south to create a 13.5-foot wide left-thru-right lane. Shift 2 seconds green time from the EB/WB phase to the NB/SB phase.			
Grand Avenue & 74th Street (Unsignalized)	Install a new traffic signal with the following signal timing/phasing plan:							
	Phase	G(s)	A(s)	R(s)	Phase	G(s)	A(s)	R(s)
	EB/WB:	49	3	2	EB/WB:	49	3	2
	NB/SB:	31	3	2	NB/SB:	31	3	2
	Cycle length = 90 seconds				Cycle length = 90 seconds			

All of the improvement measures discussed above are subject to review and approval by NYCDOT.

It should be noted that the measures identified above would result in displacement of approximately 25 on-street parking spaces at intersection approaches where parking prohibition was recommended as mitigation. The displaced parking spaces would increase the overall on-street parking utilization in the study area to approximately 71 percent during the morning period.

Table 5-10  
2012 No Build, Build and Build with Mitigation Conditions Level of Service Analysis  
Signalized Intersections

Intersections	AM Peak Hour						PM Peak Hour																	
	2012 No Build			2012 Build-w/ Mitigation			2012 No Build			2012 Build														
	Lane Group	v/c Ratio	Delay (spv)	Lane Group	v/c Ratio	Delay (spv)	LOS	Lane Group	v/c Ratio	Delay (spv)	LOS	Lane Group	v/c Ratio	Delay (spv)	LOS									
<b>Grand Avenue &amp; 69th Street</b>																								
Eastbound	LT	0.68	26.5	C	LT	0.77	31.1	C	LT	0.87	43.0	D	LT	0.62	23.9	C	LT	0.67	25.6	C	LT	0.74	31.4	C
	R	0.00	13.3	B	R	0.00	13.3	B	R	0.00	15.0	B	R	0.00	13.4	B	R	0.00	13.4	B	R	0.00	15.0	B
Westbound	LTR	0.59	21.0	C	LTR	0.65	22.7	C	LTR	0.73	27.7	C	LTR	0.37	17.1	B	LTR	0.45	18.2	B	LTR	0.50	21.0	C
Northbound	LT	0.69	26.1	C	LT	0.69	26.1	C	LT	0.64	22.4	C	LT	0.55	22.0	C	LT	0.55	22.0	C	LT	0.51	19.2	B
	R	0.09	15.3	B	R	0.15	16.0	B	R	0.14	14.1	B	R	0.10	15.5	B	R	0.14	15.9	B	R	0.13	14.0	B
Southbound	LTR	0.79	32.8	C	LTR	0.99	64.8	E +	LTR	0.86	37.1	D	LTR	0.95	51.4	D	LTR	1.06	79.0	E +	LTR	0.93	44.1	D
	Intersection	26.0	C	Intersection	34.9	C	Intersection	31.1	C	Intersection	31.1	C	Intersection	30.6	C	Intersection	39.4	D	Intersection	39.4	D	Intersection	29.6	C
<b>Grand Avenue &amp; 72nd Place</b>																								
Eastbound	LT	0.48	9.8	A	LT	0.53	10.6	B	LT	0.53	10.6	B	LT	0.54	11.3	B	LT	0.54	11.3	B	LT	0.54	11.3	B
Westbound	TR	0.38	8.6	A	TR	0.40	8.8	A	TR	0.40	8.8	A	TR	0.41	9.3	A	TR	0.41	9.3	A	TR	0.41	9.3	A
Northbound	L	0.70	42.9	D	L	0.79	49.4	D +	L	0.79	49.4	D +	L	0.75	44.7	D	L	0.75	44.7	D	L	0.75	44.7	D
	TR	0.11	27.0	C	TR	0.18	27.9	C	TR	0.18	27.9	C	TR	0.17	27.0	C	TR	0.17	27.0	C	TR	0.17	27.0	C
Southbound	LR	0.55	40.0	D	LR	0.58	41.7	D	LR	0.58	41.7	D	LR	0.55	38.8	D	LR	0.55	38.8	D	LR	0.55	38.8	D
	Intersection	18.7	B	Intersection	20.6	C	Intersection	20.6	C	Intersection	20.6	C	Intersection	20.6	C	Intersection	19.9	B	Intersection	20.6	C	Intersection	19.9	B
<b>Grand Ave &amp; 74th Street (Shopping Center Driveway)</b>																								
Eastbound	LTR	0.75	23.1	C	LTR	1.00	56.1	E +	LT	0.46	16.2	B	LTR	0.94	37.4	D	LTR	1.14	100.7	F +	LT	0.66	19.1	B
					R	0.73	28.1	C									R	0.60	21.1	C				
Westbound	LTR	0.56	16.5	B	LTR	0.77	25.1	C	LTR	0.81	30.3	C	LTR	0.44	14.1	B	LTR	0.54	16.3	B	LTR	0.52	15.9	B
Northbound	LTR	0.89	52.7	D	LTR	1.21	148.0	F +	LT	0.80	42.8	D	LTR	0.62	32.4	C	LTR	0.91	58.0	E +	LT	0.61	32.8	C
					R	0.31	21.6	C									R	0.30	23.7	C				
Southbound	LTR	0.25	22.3	C	LTR	0.28	22.9	C	LTR	0.45	25.9	C	LTR	0.48	26.8	C	LTR	0.48	26.8	C	LTR	0.50	27.3	C
	Intersection	28.2	C	Intersection	66.6	E	Intersection	27.5	C	Intersection	29.2	C	Intersection	29.2	C	Intersection	62.7	E	Intersection	62.7	E	Intersection	21.9	C
<b>57th Avenue &amp; 74th Street</b>																								
Eastbound	LTR	0.66	19.6	B	LTR	0.79	26.3	C	LTR	0.75	23.4	C	LTR	0.68	19.5	B	LTR	0.73	21.3	C	LTR	0.79	26.3	C
Westbound	LTR	1.11	90.2	F	LTR	1.18	115.8	F +	LTR	1.05	67.6	E	LTR	0.81	29.2	C	LTR	0.86	33.7	C	LTR	0.92	43.9	D
Northbound	LTR	0.84	27.1	C	LTR	0.90	33.9	C	LTR	0.94	41.0	D	LTR	0.71	19.7	B	LTR	0.75	21.4	C	LTR	0.69	17.8	B
Southbound	LTR	0.59	17.4	B	LTR	0.80	27.9	C	LTR	0.85	33.5	C	LTR	0.59	18.3	B	LTR	1.07	81.2	F +	LTR	0.95	45.0	D
	Intersection	44.6	D	Intersection	56.9	E	Intersection	44.4	D	Intersection	21.6	C	Intersection	21.6	C	Intersection	38.6	D	Intersection	38.6	D	Intersection	32.2	C
<b>Grand Avenue and 74th Street</b>																								
Eastbound	LT	0.08	10.4	B	LT	0.08	10.5	B	LT	0.91	35.7	D	LT	0.06	9.9	A	LT	0.07	10.0+	B	LT	0.74	21.5	C
Westbound					TR	0.63	17.3	B									TR	0.46	14.1	B				
Southbound	LR	0.7	60.9	F	LR	1.03	140.5	F +	LR	0.81	70.9	F	LR	1.00	121.4	F +	LR	0.32	23.4	C				
	Unsignalized			Unsignalized	Intersection	26.6	C	Unsignalized	Intersection	26.6	C	Unsignalized	Intersection	19.1	B	Unsignalized	Intersection	19.1	B	Unsignalized	Intersection	19.1	B	

Notes: L = Left Turn, T = Through, R = Right Turn, Defl. = Defacto Left Turn; LOS = Level of Service.

**PEDESTRIAN SAFETY**

Accident data for the study area intersections were obtained from the New York State Department of Transportation (NYSDOT) for the period between January 1, 2005 and December 31, 2007. The data obtained quantify the total number of reportable accidents (involving fatality, injury, or more than \$1,000 in property damage), fatalities, and injuries during the study period, as well as a yearly breakdown of pedestrian- and bicycle-related accidents at each location. According to the *City Environmental Quality Review (CEQR) Technical Manual*, a high pedestrian accident location is one where there were five or more pedestrian-related accidents in any year of the most recent three-year period for which data are available.

During this period, a total of 33 reportable accidents, 1 fatality, 35 injuries, and 4 pedestrian-related accidents occurred at the study area intersections. A rolling total of accident data identifies no study area intersection as a high pedestrian accident location in the 2005 to 2007 period. Table 5-11 depicts total accident characteristics by intersection during the study period, as well as, a breakdown of pedestrian and bicycle accidents by year and location.

**Table 5-11  
Accident Data**

Intersection		Study Period			Accidents by Year					
North-South Roadway	East-West Roadway	Reportable Accidents	Total Fatalities	Total Injuries	Pedestrian			Bicycle		
					2005	2006	2007	2005	2006	2007
74th Street	57th Avenue	8	0	6	1	0	0	0	0	0
74th Street	Grand Avenue – Mall Entrance	3	0	3	0	0	1	0	0	0
74th Street	Grand Avenue	1	0	1	0	0	0	0	0	0
73rd Place	Grand Avenue	0	0	0	0	0	0	0	0	0
72nd Place	Grand Avenue	0	0	0	0	0	0	0	0	0
69th Street	Grand Avenue	15	0	19	0	0	1	0	0	0
72nd Place	57th Avenue	0	0	0	0	0	0	0	0	0
73rd Place	57th Avenue	0	0	0	0	0	0	0	0	0
69th Street	Borden Avenue Westbound	2	1	0	0	0	0	0	0	0
69th Street	Borden Avenue Eastbound	4	0	6	0	1	0	0	0	0

Source: NYSDOT January 1, 2005 to December 31, 2007 accident data.

\*

## A. INTRODUCTION

The proposed project is expected to be ready for occupancy in 2012. Based on travel demand estimates, the proposed project is not expected to exceed the 2001 *City Environmental Quality Review (CEQR) Technical Manual* thresholds for transit analyses of 200 peak hour transit riders at any given transit facility. Therefore, this chapter includes a qualitative transit assessment and a quantitative pedestrian assessment of the critical elements within the study area with a determination of significant adverse pedestrian impacts that require mitigation.

The analysis results as discussed in detail later in the chapter show that new trips associated with the proposed project would not result in any significant pedestrian impacts at any analysis location.

## B. METHODOLOGY

A travel demand projection was developed to identify the transportation elements likely to be affected by the proposed project. Based on criteria specified in the *CEQR Technical Manual*, it was determined that a quantified assessment of pedestrian circulation would be required. Since the estimated trips generated by the proposed project would not exceed impact thresholds for transit station operations, subway, or bus line-haul, these elements were not analyzed quantitatively.

### PEDESTRIAN OPERATIONS

The adequacy of the study area's sidewalks, crosswalks, and corner reservoir capacities in relation to the demand imposed on them was assessed using the methodologies presented in the 2000 *Highway Capacity Manual (HCM 2000)*. Sidewalks were analyzed in terms of pedestrian flow. The calculation of the average pedestrians per foot per minute (PFM) of effective walkway width is the basis for *Level of Service (LOS)* analysis. However, due to the tendency of pedestrians to move in congregated groups, a platoon factor (+4 PFM) is applied in the calculation of pedestrian flow to more accurately estimate the dynamics of walking. This procedure generally results in a LOS one level poorer than the average flow.

Crosswalks and street corners are not easily measured in terms of free pedestrian flow, as they are influenced by the effects of traffic signals. Street corners must be able to provide sufficient space for a mix of standing pedestrians (queued to cross a street) and circulating pedestrians (crossing the street or moving around the corner). The HCM methodologies apply a measure of time and space availability based on the area of the corner, the timing of the intersection signal, and the estimated space used by circulating pedestrians.

The total "time-space" available for these activities is the net area of the corner (in square feet) multiplied by the cycle length, which is expressed in square feet per minute. The analysis then determines the total circulation time for all pedestrian movements at the corner (expressed as

pedestrians per minute). The ratio of net time-space divided by pedestrian circulation time provides the LOS measurement of square feet per pedestrian (SFP).

Crosswalk LOS is also a function of time and space. Similar to the street corner analysis, crosswalk conditions are first expressed as a measurement of the available area (the crosswalk width multiplied by the width of the street) and the permitted crossing time. This measure is expressed in square feet per minute. The average time required for a pedestrian to cross the street is calculated based on the width of the street and an assumed walking speed. The ratio of time-space available in the crosswalk to the average crossing time is the LOS measurement of available square feet per pedestrian. The LOS analysis also accounts for vehicular turning movements that traverse the crosswalk.

Table 6-1 shows the LOS standards for sidewalks, corner reservoirs, and crosswalks.

**Table 6-1  
Level of Service Criteria for Pedestrian Elements**

LOS	Sidewalks	Corner Reservoirs and Crosswalks
A	5 PFM or less	60 SFP or More
B	5 to 7 PFM	40 to 60 SFP
C	7 to 10 PFM	24 to 40 SFP
D	10 to 15 PFM	15 to 24 SFP
E	15 to 23 PFM	8 to 15 SFP
F	More than 23 PFM	Less than 8 SFP

Notes: PFM = pedestrians per foot per minute. SFP = square feet per pedestrian.  
Source: New York City Mayor's Office of Environmental Coordination, City Environmental Quality Review Technical Manual (December 2001).

The *CEQR Technical Manual* specifies that a mid-LOS D condition or better is considered reasonable for sidewalks, corner reservoirs, and crosswalks outside the Manhattan Central Business District (CBD) which includes the study area for this project. For crosswalks and corner reservoirs, a mid-LOS D condition requires a minimum of 20 SFP, while for sidewalks, a mid-LOS D condition requires a maximum of 13 PFM.

For areas akin to the study area, project-related sidewalk impacts are considered significant and require examination of mitigation if there is an increase of 2 PFM over No Build conditions that are characterized by flow rates greater than 13 PFM (mid-LOS D). For corners and crosswalks, a decrease of 1 SFP under the Build condition when the No Build condition has an average occupancy of less than 20 SFP (mid-LOS D) is considered significant. However, if there is less than a 200-person increase at a location within the peak hour, any impact is not considered significant since such increases would not typically be perceptible.

### C. EXISTING CONDITIONS

Existing pedestrian levels are based on field surveys conducted in April, 2008. The selected count periods of 7:00 to 9:00 AM and 2:00 to 4:00 PM represent the peak hours of pedestrian and transit activities in the study area.

#### TRANSIT STUDY AREA

The project site is located in an area served by Grand Avenue/Newtown Creek Station (G, R, and V) and Q18, Q45, Q58, Q59, and Q67 bus routes (see Figure 6-1). A description of each of these transit modes that would be affected by trips associated with the proposed project is provided below.

*SUBWAY SERVICE*

Based on the travel demand estimates, it was determined that approximately 123 project-generated subway trips during each of the AM and PM peak 15-minute periods will be spread across several station elements at Grand Avenue/Newtown Creek station.

As specified by the *CEQR Technical Manual*, if the proposed project is considered unlikely to create any noticeable constraints on any subway station elements or to produce a significant transit impact a quantitative analysis is not required. Consequently, the proposed project is not expected to create any operational constraints on transit. The following section provides a qualitative discussion of the subway services in the study area.

The project site is located near Grand Avenue/ Newtown Creek subway station which provides service to the G, R, and V subway lines operated by the New York City Transit (NYCT).

*G Subway Line*

The G train operates between Forest Hills, Queens, and Smith-9th Street, Brooklyn.

*R Subway Line*

The R train operates between 71st Avenue, Queens, and 95th Street, Brooklyn.

*V Subway Line*

The V train operates between Forest Hills, Queens, and the Lower East Side between 6:00 AM and 11:00 PM on weekdays only.

*BUS SERVICE*

Based on the travel demand estimates and the availability of Q18, Q45, Q58, Q59 and Q67 bus routes near the proposed project, it was determined that no individual bus route would experience 200 or more project generated transit trips—the CEQR recommended threshold for undertaking quantified bus analysis. Consequently, it is expected that the project would not create a noticeable constraint on bus capacity; therefore, a quantitative bus analysis is not warranted. The following section provides a qualitative discussion of local bus routes serving the study area.

Table 6-2 provides a summary of the NYCT local bus routes, which provide regular service to the study area and their weekday frequencies of operation. All of these routes use standard buses with a guideline capacity of 54 passengers per bus.

**Table 6-2  
NYCT Local Bus Routes Serving The Study Area**

Bus Route	Start Point	End Point	Routing	Freq. of Bus Service (Headway in Minutes)	
				AM	PM
Q18	Maspeth	Astoria	69th Street/30th Avenue	8	15
Q45	Juniper Valley	Jackson Heights	69th Street/Roosevelt Avenue	7	15
Q58	Ridgewood	Flushing	Grand Avenue	4	6
Q59	Rego Park	Williamsburg	Grand Avenue	10	15
Q67	Ridgewood	Long Island City	69th Street/Grand Avenue	10	30

Source: New York City Transit, Queens Bus Map/Timetable (2008).



**PEDESTRIAN STUDY AREA**

The pedestrian study area considers the sidewalks, corner reservoirs, and crosswalks that would be most affected by new trips generated by the proposed project. Since transit trips also contain a walking component, the pedestrian network considers the major routes from the subway station and bus stops. The resultant study area includes three signalized intersections near the project site as listed below.

- 74th Street and Grand Avenue;
- 74th Street and 57th Avenue; and
- Queens Blvd and Grand Avenue.

**ANALYSIS RESULTS**

*STREET-LEVEL PEDESTRIAN OPERATIONS*

As described above, the study area sidewalks, corner reservoirs, and crosswalks were assessed for the AM and PM peak periods. Existing peak 15-minute volumes were developed for three intersections close to the project site where most pedestrian trips are anticipated. As shown in Tables 6-3 through 6-5, all analyzed pedestrian elements operate at acceptable levels during the AM and PM peak 15-minute periods.

**Table 6-3**  
**2008 Existing Conditions: Pedestrian LOS Analysis for Sidewalks**

Location	Sidewalk	Effective Width (feet)	15 Minute Two-Way Volume	Average		Platoon	
				PFM	LOS	PFM	LOS
<b>AM Peak Period</b>							
Grand Avenue between 74th St W and 74th Street E	North	10.8	91	0.6	A	4.6	A
	South	11.8	17	0.1	A	4.1	A
Grand Avenue between 74th St E and 79th Street	North	10.0	94	0.6	A	4.6	A
	South	11.8	17	0.1	A	4.1	A
74th Street between Grand Avenue and 57th Avenue	East	11.3	20	0.1	A	4.1	A
	West	12.0	7	0.0	A	4.0	A
57th Avenue between 73rd Place and 74th Street	North	7.0	25	0.2	A	4.2	A
	South	4.0	15	0.3	A	4.3	A
57th Avenue between 74th Street and LIE Ramp	North	6.4	25	0.3	A	4.3	A
	South	7.5	16	0.1	A	4.1	A
74th Street between 57th Avenue and Borden Avenue	East	12.0	16	0.1	A	4.1	A
	West	10.6	20	0.1	A	4.1	A
Queens Blvd between Reeder Street and Broadway	North	13.4	90	0.4	A	4.4	A
	South	8.0	106	0.9	A	4.9	A
Queens Blvd between Broadway and 54th Avenue	North	7.0	141	1.3	A	5.3	B
	South	6.0	177	2.0	A	6.0	B
Broadway between Justice Avenue and Queens Blvd	East	8.0	92	0.8	A	4.8	A
	West	7.8	152	1.3	A	5.3	B
Grand Avenue between Queens Blvd and Seabury Street	East	7.5	126	1.1	A	5.1	B
	West	10.6	165	1.0	A	5.0	B

**Table 6-3 (cont'd)**  
**2008 Existing Conditions: Pedestrian LOS Analysis for Sidewalks**

Location	Sidewalk	Effective Width (feet)	15 Minute Two-Way Volume	Average		Platoon	
				PFM	LOS	PFM	LOS
<b>PM Peak Period</b>							
Grand Avenue between 74th St W and 74th Street E	North	10.8	91	0.6	A	4.6	A
	South	11.8	17	0.1	A	4.1	A
Grand Avenue between 74th St E and 79th Street	North	10.0	94	0.6	A	4.6	A
	South	11.8	17	0.1	A	4.1	A
74th Street between Grand Avenue and 57th Avenue	East	11.3	20	0.1	A	4.1	A
	West	12.0	7	0.0	A	4.0	A
57th Avenue between 73rd Place and 74th Street	North	7.0	25	0.2	A	4.2	A
	South	4.0	15	0.3	A	4.3	A
57th Avenue between 74th Street and LIE Ramp	North	6.4	25	0.3	A	4.3	A
	South	7.5	16	0.1	A	4.1	A
74th Street between 57th Avenue and Borden Avenue	East	12.0	16	0.1	A	4.1	A
	West	10.6	20	0.1	A	4.1	A
Queens Blvd between Reeder Street and Broadway	North	13.4	90	0.4	A	4.4	A
	South	8.0	106	0.9	A	4.9	A
Queens Blvd between Broadway and 54th Avenue	North	7.0	141	1.3	A	5.3	B
	South	6.0	177	2.0	A	6.0	B
Broadway between Justice Avenue and Queens Blvd	East	8.0	92	0.8	A	4.8	A
	West	7.8	152	1.3	A	5.3	B
Grand Avenue between Queens Blvd and Seabury Street	East	7.5	126	1.1	A	5.1	B
	West	10.6	165	1.0	A	5.0	B

Note: PFM = pedestrians per foot per minute

**Table 6-4**  
**2008 Existing Conditions: Pedestrian LOS Analysis for Corner Reservoirs**

Locations	Corner	AM Peak Period		PM Peak Period	
		SFP	LOS	SFP	LOS
74th Street and Grand Avenue	Southeast	822.9	A	822.9	A
	Southwest	2327.9	A	2327.9	A
57th Street and 74th Street	Northeast	806.9	A	806.9	A
	Southeast	4327.9	A	4327.9	A
	Southwest	566.4	A	566.4	A
	Northwest	1510.5	A	1510.5	A
Queens Blvd and Grand Avenue	Northeast	314.7	A	314.7	A
	Southeast	264.0	A	264.0	A
	Southwest	230.3	A	230.3	A
	Northwest	215.9	A	215.9	A

Note: SFP = square feet per pedestrian

**Table 6-5**  
**2008 Existing Conditions: Pedestrian Crosswalk LOS Analysis**

Location	Crosswalk	Street Width (feet)	Crosswalk Width (feet)	Conditions with conflicting vehicles			
				AM		PM	
				SFP	LOS	SFP	LOS
74th Street and Grand Avenue	North	27.5	14	248.8	A	231.5	A
	East	52.5	14	240.9	A	242.3	A
	South	49.5	14	1720.7	A	1796.0	A
	West	56.5	13	3540.8	A	3614.5	A
74th Street and 57th Avenue	North	50	10	504.3	A	517.6	A
	East	39.1	12	758.5	A	678.5	A
	South	49.1	11	729.2	A	763.5	A
	West	39.2	10.8	691.4	A	708.5	A
Grand Avenue and Queens Blvd	North	56.3	16	288.5	A	288.5	A
	East	178	16.8	442.3	A	442.3	A
	South	51.3	13	258.8	A	258.8	A
	West	196.3	14	81.1	A	81.1	A

Note: SFP = square feet per pedestrian

## D. THE FUTURE WITHOUT THE PROPOSED PROJECT

Pedestrian conditions in the future without the proposed project were assessed to establish a baseline No Build condition against which to evaluate the potential project impacts. The No Build year incorporates general background growth and transportation improvements that may affect transit service and pedestrian movements in the study area.

### PEDESTRIAN VOLUME PROJECTIONS

Future No Build peak hour pedestrian levels were estimated by applying a background growth rate of 1.0 percent per year (as recommended by the *CEQR Technical Manual*), projected over four years. As described in Chapter 5, "Traffic and Parking," there are no notable development projects scheduled for completion in the study area that would generate substantial new transit and pedestrian trips. Therefore, only the background growth trips were incorporated into the No Build analysis.

### ANALYSIS RESULTS

#### *STREET-LEVEL PEDESTRIAN OPERATIONS*

The No Build peak period volume projections were applied to the pedestrian analysis networks described previously. As shown in Tables 6-6 through 6-8, all sidewalks, crosswalks, and corner reservoir analysis locations would continue to operate at acceptable levels during both the AM and PM peak 15-minute periods.

**Table 6-6**  
**2012 No Build Conditions: Pedestrian LOS Analysis for Sidewalks**

Location	Sidewalk	Effective Width (feet)	15 Minute Two-Way Volume	Average		Platoon	
				PFM	LOS	PFM	LOS
<b>AM Peak Period</b>							
Grand Avenue between 74th St W and 74th Street E	North	10.8	94	0.6	A	4.6	A
	South	11.8	17	0.1	A	4.1	A
Grand Avenue between 74th St E and 79th Street	North	10.0	97	0.6	A	4.6	A
	South	11.8	17	0.1	A	4.1	A
74th Street between Grand Avenue and 57th Avenue	East	11.3	21	0.1	A	4.1	A
	West	12.0	7	0.0	A	4.0	A
57th Avenue between 73rd Place and 74th Street	North	7.0	26	0.2	A	4.2	A
	South	4.0	15	0.3	A	4.3	A
57th Avenue between 74th Street and LIE Ramp	North	6.4	26	0.3	A	4.3	A
	South	7.5	16	0.1	A	4.1	A
74th Street between 57th Avenue and Borden Avenue	East	12.0	17	0.1	A	4.1	A
	West	10.6	21	0.1	A	4.1	A
Queens Blvd between Reeder Street and Broadway	North	13.4	94	0.5	A	4.5	A
	South	8.0	110	0.9	A	4.9	A
Queens Blvd between Broadway and 54th Avenue	North	7.0	147	1.4	A	5.4	B
	South	6.0	184	2.0	A	6.0	B
Broadway between Justice Avenue and Queens Blvd	East	8.0	96	0.8	A	4.8	A
	West	7.8	158	1.4	A	5.4	B
Grand Avenue between Queens Blvd and Seabury Street	East	7.5	131	1.2	A	5.2	B
	West	10.6	172	1.1	A	5.1	B
<b>PM Peak Period</b>							
Grand Avenue between 74th St W and 74th Street E	North	10.8	101	0.6	A	4.6	A
	South	11.8	102	0.6	A	4.6	A
Grand Avenue between 74th St E and 79th Street	North	10.0	78	0.5	A	4.5	A
	South	11.8	59	0.3	A	4.3	A
74th Street between Grand Avenue and 57th Avenue	East	11.3	28	0.2	A	4.2	A
	West	12.0	34	0.2	A	4.2	A
57th Avenue between 73rd Place and 74th Street	North	7.0	9	0.1	A	4.1	A
	South	4.0	4	0.1	A	4.1	A
57th Avenue between 74th Street and LIE Ramp	North	6.4	9	0.1	A	4.1	A
	South	7.5	4	0.0	A	4.0	A
74th Street between 57th Avenue and Borden Avenue	East	12.0	5	0.0	A	4.0	A
	West	10.6	6	0.0	A	4.0	A
Queens Blvd between Reeder Street and Broadway	North	13.4	91	0.5	A	4.5	A
	South	8.0	197	1.6	A	5.6	B
Queens Blvd between Broadway and 54th Avenue	North	7.0	135	1.3	A	5.3	B
	South	6.0	151	1.7	A	5.7	B
Broadway between Justice Avenue and Queens Blvd	East	8.0	163	1.4	A	5.4	B
	West	7.8	139	1.2	A	5.2	B
Grand Avenue between Queens Blvd and Seabury Street	East	7.5	152	1.4	A	5.4	B
	West	10.6	218	1.4	A	5.4	B

Note: PFM = pedestrians per foot per minute

**Table 6-7**  
**2012 No Build Conditions: Pedestrian LOS Analysis for Corner Reservoirs**

Locations	Corner	AM Peak Period		PM Peak Period	
		SFP	LOS	SFP	LOS
74th Street and Grand Avenue	Southeast	806.6	A	543.5	A
	Southwest	2327.9	A	412.4	A
57th Street and 74th Street	Northeast	783.5	A	1532.6	A
	Southeast	4327.9	A	18572.6	A
	Southwest	547.8	A	1143.7	A
	Northwest	1431.0	A	1936.2	A
Queens Blvd and Grand Avenue	Northeast	303.6	A	229.1	A
	Southeast	254.5	A	214.8	A
	Southwest	220.8	A	181.3	A
	Northwest	207.1	A	244.0	A

**Note:** SFP = square feet per pedestrian

**Table 6-8**  
**2012 No Build Conditions: Pedestrian Crosswalk LOS Analysis**

Location	Crosswalk	Street Width (feet)	Crosswalk Width (feet)	Conditions with conflicting vehicles			
				AM		PM	
				SFP	LOS	SFP	LOS
74th Street and Grand Avenue	North	27.5	14	238.5	A	231.5	A
	East	52.5	14	233.1	A	242.3	A
	South	49.5	14	1713.6	A	1796.0	A
	West	56.5	13	3490.7	A	3614.5	A
74th Street and 57th Avenue	North	50	10	479.1	A	517.6	A
	East	39.1	12	751.9	A	678.5	A
	South	49.1	11	724.7	A	763.5	A
	West	39.2	10.8	649.8	A	708.5	A
Grand Avenue and Queens Blvd	North	56.3	16	277.7	A	288.5	A
	East	178	16.8	423.3	A	442.3	A
	South	51.3	13	250.8	A	258.8	A
	West	196.3	14	77.4	A	81.1	A

**Note:** SFP = square feet per pedestrian

## E. PROBABLE IMPACTS OF THE PROPOSED PROJECT

The future with the proposed project would result in increased transit and pedestrian trips as compared to the No Build condition. This section describes the projected travel patterns of the site-related trips and assesses their potential impacts on nearby transit and pedestrian facilities.

### TRIP DISTRIBUTION AND ASSIGNMENT

Primary pedestrian access to the project site would be provided along 74th Street between Grand Avenue and 57th Avenue. The following assumptions were used to assign auto, transit, and walk-only trips to the project site.

- Auto drop-off and taxi trips were assumed to utilize the entrance on 74th Street and the southwest sidewalk of Grand Avenue and 74th Street intersection.
- Auto drive-in/out trips generated by staff members and students were assumed to utilize on-street parking facilities located in the vicinity of the project site. In total, 50 project-

generated auto drive-in/out trips were projected during each of AM and PM peak 15-minute periods.

- The assignment of the subway person trips is based on the available routes within the study area and transfer opportunities within the New York City subway system. In total, 62 project-generated subway person trips were projected during each of the AM and PM peak 15-minute periods and were assigned to the Grand Avenue/ Newtown Creek subway station. All subway trips were assumed to be connected to Q58 and Q59 buses which run along Grand Avenue.
- Bus person trips would be distributed to the five bus routes available in the study area. In total, 174 project-generated bus person trips were estimated during each of the AM and PM peak 15-minute periods. The assignment of bus person trips began with designating specific bus stops at which users would access the nearby bus routes, then tracing these trips through logical walking routes to the project site.
- While all trips would require a walking component that connects the origins and destinations with their respective mode of transportation, a portion of the trips are made only by walking. These trips were estimated at 142 total walk only project-generated trips during each of the AM and PM peak 15-minute periods. The assignment of these trips accounted for the area's pedestrian network, and nearby populated neighborhoods.

## ANALYSIS RESULTS

### *STREET-LEVEL PEDESTRIAN OPERATIONS*

Pedestrian trips associated with the proposed project would result in increased volumes at the analysis locations. The analysis conducted for the Build conditions accounts for the distribution of project-generated trips overlaid onto the No Build network's sidewalks, corner reservoirs, and crosswalks. Tables 6-9 to 6-11 present the future build operating conditions for the analysis elements. All sidewalks, crosswalks, and corner reservoir analysis locations would continue to operate at acceptable levels during both the AM and PM peak 15-minute periods.

As discussed earlier in Section B, "Methodology," impacts to corners and crosswalks are considered significant if the proposed project would result in a deterioration in level-of-service from No Build mid-LOS D or better to Build LOS E or F, or when the available circulation space is decreased by 1 SFP or more at a location with a No Build operation of mid-LOS D or worse. Project-related sidewalk impacts are considered significant and require examination of mitigation if there is an increase of 2 PFM over No Build conditions that are characterized by flow rates greater than 15 PFM (LOS D). Based on these criteria, the proposed project would not result in any significant adverse pedestrian impacts during the AM and PM peak periods.

**Table 6-9**  
**2012 Build Conditions: Pedestrian LOS Analysis for Sidewalks**

Location	Sidewalk	Effective Width (feet)	15 Minute Two-Way Volume	Average		Platoon	
				PFM	LOS	PFM	LOS
<b>AM Peak Period</b>							
Grand Avenue between 74th St W and 74th Street E	North	10.8	199	1.2	A	5.2	B
	South	11.8	87	0.5	A	4.5	A
Grand Avenue between 74th St E and 79th Street	North	10.0	111	0.7	A	4.7	A
	South	11.8	99	0.6	A	4.6	A
74th Street between Grand Avenue and 57th Avenue	East	11.3	45	0.3	A	4.3	A
	West	12.0	468	2.6	A	6.6	B
57th Avenue between 73rd Place and 74th Street	North	7.0	131	1.2	A	5.2	B
	South	4.0	15	0.3	A	4.3	A
57th Avenue between 74th Street and LIE Ramp	North	6.4	26	0.3	A	4.3	A
	South	7.5	16	0.1	A	4.1	A
74th Street between 57th Avenue and Borden Avenue	East	12.0	24	0.1	A	4.1	A
	West	10.6	49	0.3	A	4.3	A
Queens Blvd between Reeder Street and Broadway	North	13.4	94	0.5	A	4.5	A
	South	8.0	110	0.9	A	4.9	A
Queens Blvd between Broadway and 54th Avenue	North	7.0	209	2.0	A	6.0	B
	South	6.0	184	2.0	A	6.0	B
Broadway between Justice Avenue and Queens Blvd	East	8.0	96	0.8	A	4.8	A
	West	7.8	158	1.4	A	5.4	B
Grand Avenue between Queens Blvd and Seabury Street	East	7.5	131	1.2	A	5.2	B
	West	10.6	172	1.1	A	5.1	B
<b>PM Peak Period</b>							
Grand Avenue between 74th St W and 74th Street E	North	10.8	145	0.9	A	4.9	A
	South	11.8	138	0.8	A	4.8	A
Grand Avenue between 74th St E and 79th Street	North	10.0	92	0.6	A	4.6	A
	South	11.8	203	1.1	A	5.1	B
74th Street between Grand Avenue and 57th Avenue	East	11.3	52	0.3	A	4.3	A
	West	12.0	461	2.6	A	6.6	B
57th Avenue between 73rd Place and 74th Street	North	7.0	114	1.1	A	5.1	B
	South	4.0	4	0.1	A	4.1	A
57th Avenue between 74th Street and LIE Ramp	North	6.4	9	0.1	A	4.1	A
	South	7.5	4	0.0	A	4.0	A
74th Street between 57th Avenue and Borden Avenue	East	12.0	12	0.1	A	4.1	A
	West	10.6	34	0.2	A	4.2	A
Queens Blvd between Reeder Street and Broadway	North	13.4	91	0.5	A	4.5	A
	South	8.0	259	2.2	A	6.2	B
Queens Blvd between Broadway and 54th Avenue	North	7.0	135	1.3	A	5.3	B
	South	6.0	213	2.4	A	6.4	B
Broadway between Justice Avenue and Queens Blvd	East	8.0	163	1.4	A	5.4	B
	West	7.8	139	1.2	A	5.2	B
Grand Avenue between Queens Blvd and Seabury Street	East	7.5	152	1.4	A	5.4	B
	West	10.6	218	1.4	A	5.4	B
<b>Note: PFM = pedestrians per foot per minute</b>							

**Table 6-10**  
**2012 Build Conditions: Pedestrian LOS Analysis for Corner Reservoirs**

Locations	Corner	AM Peak Period		PM Peak Period	
		SFP	LOS	SFP	LOS
74th Street and Grand Avenue	Southeast	278.9	A	181.2	A
	Southwest	101.9	A	83.4	A
57th Street and 74th Street	Northeast	446.4	A	625.3	A
	Southeast	3507.2	A	9286.3	A
	Southwest	283.0	A	399.0	A
	Northwest	286.0	A	298.4	A
Queens Blvd and Grand Avenue	Northeast	303.6	A	229.1	A
	Southeast	254.5	A	163.4	A
	Southwest	220.8	A	140.8	A
	Northwest	207.1	A	244.0	A

Note: SFP = square feet per pedestrian

**Table 6-11**  
**2012 Build Conditions: Pedestrian Crosswalk LOS Analysis**

Location	Crosswalk	Street Width (feet)	Crosswalk Width (feet)	Conditions with conflicting vehicles			
				AM		PM	
				SFP	LOS	SFP	LOS
74th Street and Grand Avenue	North	27.5	14	201.0	A	167.6	A
	East	52.5	14	227.2	A	248.5	A
	South	49.5	14	118.9	A	68.0	A
	West	56.5	13	53.4	B	94.0	A
74th Street and 57th Avenue	North	50	10	244.8	A	313.5	A
	East	39.1	12	488.3	A	821.2	A
	South	49.1	11	715.6	A	3486.5	A
	West	39.2	10.8	241.1	A	267.9	A
Grand Avenue and Queens Blvd	North	56.3	16	277.7	A	331.8	A
	East	178	16.8	423.3	A	143.0	A
	South	51.3	13	250.8	A	121.6	A
	West	196.3	14	77.4	A	98.2	A

Note: SFP = square feet per pedestrian

\*



## A. INTRODUCTION

This chapter identifies and analyzes the potential for significant air quality impacts associated with the proposed school. Air quality impacts can be either direct or indirect. Direct impacts stem from emissions generated by stationary sources at a project site, such as emissions from fuel burned on site for heating, ventilation, and air conditioning (HVAC) systems. Indirect impacts are caused by emissions from nearby existing stationary sources (impacts on the proposed project) or by emissions from on-road vehicle trips generated by a project or other changes to future traffic conditions due to the a project. The potential for indirect mobile source impacts from the proposed project was analyzed.

The proposed school would include natural gas-burning heat and hot water systems. Therefore, a stationary source analysis was conducted to evaluate potential future pollutant concentrations with the proposed heat and hot water systems. In addition, potential effects of stationary source emissions from existing nearby industrial facilities on the proposed school are assessed.

This chapter also describes the expected use of potentially hazardous materials and the procedures and systems that would be employed in the proposed school to ensure the safety of staff, students and the surrounding community in the event of a chemical spill in one of the proposed laboratories.

## B. POLLUTANTS FOR ANALYSIS

Ambient air quality is affected by air pollutants produced by both motor vehicles and stationary sources. Emissions from motor vehicles are referred to as mobile source emissions, while emissions from fixed facilities are referred to as stationary source emissions. Ambient concentrations of carbon monoxide (CO) are predominantly influenced by mobile source emissions. Particulate matter (PM), volatile organic compounds (VOCs), and nitrogen oxides (NO and NO<sub>2</sub>, collectively referred to as NO<sub>x</sub>) are emitted from both mobile and stationary sources. Fine PM is also formed when emissions of NO<sub>x</sub>, sulfur oxides (SO<sub>x</sub>), ammonia, organic compounds, and other gases react or condense in the atmosphere. Emissions of sulfur dioxide (SO<sub>2</sub>) are associated mainly with stationary sources, and sources utilizing non-road diesel such as diesel trains, marine engines, and non-road vehicles (e.g., construction engines). On-road diesel vehicles currently contribute very little to SO<sub>2</sub> emissions since the sulfur content of on-road diesel fuel, which is federally regulated, is extremely low. Ozone is formed in the atmosphere by complex photochemical processes that include NO<sub>x</sub> and VOCs.

### CARBON MONOXIDE

CO, a colorless and odorless gas, is produced in the urban environment primarily by the incomplete combustion of gasoline and other fossil fuels. In urban areas, approximately 80 to 90 percent of CO emissions are from motor vehicles. Since CO is a reactive gas which does not

persist in the atmosphere, CO concentrations can vary greatly over relatively short distances; elevated concentrations are usually limited to locations near crowded intersections, heavily traveled and congested roadways, parking lots, and garages. Consequently, CO concentrations must be predicted on a local, or microscale, basis.

The proposed project would result in changes in traffic patterns and an increase in traffic volume in the study area. Therefore, a mobile source analysis was conducted at the critical intersection in the study area to evaluate future CO concentrations with and without the proposed project.

### **NITROGEN OXIDES, VOCS, AND OZONE**

NO<sub>x</sub> are of principal concern because of their role, together with VOCs, as precursors in the formation of ozone. Ozone is formed through a series of reactions that take place in the atmosphere in the presence of sunlight. Because the reactions are slow, and occur as the pollutants are advected downwind, elevated ozone levels are often found many miles from sources of the precursor pollutants. The effects of NO<sub>x</sub> and VOC emissions from all sources are therefore generally examined on a regional basis. The contribution of any action or project to regional emissions of these pollutants would include any added stationary or mobile source emissions; the change in regional mobile source emissions of these pollutants would be related to the total vehicle miles traveled added or subtracted on various roadway types throughout the New York metropolitan area, which is designated as a moderate non-attainment area for ozone by the U.S. Environmental Protection Agency (EPA).

The proposed school would not have a significant effect on the overall volume of vehicular travel in the metropolitan area; therefore, no measurable impact on regional NO<sub>x</sub> emissions or on ozone levels is predicted. An analysis of project-related emissions of these pollutants from mobile sources was therefore not warranted.

In addition to being a precursor to the formation of ozone, NO<sub>2</sub> (one component of NO<sub>x</sub>) is also a regulated pollutant. Since NO<sub>2</sub> is mostly formed from the transformation of NO in the atmosphere, it is mostly of concern further downwind from large stationary point sources, and is not a local concern from mobile sources. (NO<sub>x</sub> emissions from fuel combustion consist of approximately 90 percent NO and 10 percent NO<sub>2</sub> at the source.) Potential impacts on local NO<sub>2</sub> concentrations from the fuel combustion for the proposed school's heat and hot water boiler systems were evaluated.

### **LEAD**

Airborne lead emissions are principally associated with industrial sources and motor vehicles that use gasoline containing lead additives. Most U.S. vehicles produced since 1975, and all produced after 1980, are designed to use unleaded fuel. As these newer vehicles have replaced the older ones, motor vehicle related lead emissions have decreased. As a result, ambient concentrations of lead have declined significantly. Nationally, the average measured atmospheric lead level in 1985 was only about one quarter the level in 1975.

In 1985, EPA announced new rules that drastically reduced the amount of lead permitted in leaded gasoline. The maximum allowable lead level in leaded gasoline was reduced from the previous limit of 1.1 to 0.5 grams per gallon effective July 1, 1985, and to 0.1 grams per gallon effective January 1, 1986. Monitoring results indicate that this action has been effective in significantly reducing atmospheric lead concentrations. Effective January 1, 1996, the Clean Air Act (CAA) banned the sale of the small amount of leaded fuel that was still available in some

parts of the country for use in on-road vehicles, concluding the 25-year effort to phase out lead in gasoline. Even at locations in the New York City area where traffic volumes are very high, atmospheric lead concentrations are far below the 3-month average national standard of 1.5 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ), and are likely to be lower than the proposed monthly standard of 0.1 to 0.3  $\mu\text{g}/\text{m}^3$ .

No significant sources of lead are associated with the proposed school and, therefore, analysis was not warranted.

### **RESPIRABLE PARTICULATE MATTER—PM<sub>10</sub> AND PM<sub>2.5</sub>**

PM is a broad class of air pollutants that includes discrete particles of a wide range of sizes and chemical compositions, as either liquid droplets (aerosols) or solids suspended in the atmosphere. The constituents of PM are both numerous and varied, and they are emitted from a wide variety of sources (both natural and anthropogenic). Natural sources include the condensed and reacted forms of naturally occurring VOC; salt particles resulting from the evaporation of sea spray; wind-borne pollen, fungi, molds, algae, yeasts, rusts, bacteria, and material from live and decaying plant and animal life; particles eroded from beaches, soil, and rock; and particles emitted from volcanic and geothermal eruptions and from forest fires. Naturally occurring PM is generally greater than 2.5 micrometers in diameter. Major anthropogenic sources include the combustion of fossil fuels (e.g., vehicular exhaust, power generation, boilers, engines, and home heating), chemical and manufacturing processes, all types of construction, agricultural activities, as well as wood-burning stoves and fireplaces. PM also acts as a substrate for the adsorption of other pollutants, often toxic and some likely carcinogenic compounds.

As described below, PM is regulated in two size categories: particles with an aerodynamic diameter of less than or equal to 2.5 micrometers (PM<sub>2.5</sub>), and particles with an aerodynamic diameter of less than or equal to 10 micrometers (PM<sub>10</sub>, which includes PM<sub>2.5</sub>). PM<sub>2.5</sub> has the ability to reach the lower regions of the respiratory tract, delivering with it other compounds that adsorb to the surfaces of the particles, and is also extremely persistent in the atmosphere. PM<sub>2.5</sub> is mainly derived from combustion material that has volatilized and then condensed to form primary PM (often soon after the release from an exhaust pipe or stack) or from precursor gases reacting in the atmosphere to form secondary PM.

Diesel-powered vehicles, especially heavy duty trucks and buses, are a significant source of respirable PM, most of which is PM<sub>2.5</sub>; PM concentrations may, consequently, be locally elevated near roadways with high volumes of heavy diesel powered vehicles. The proposed school would not result in any significant increases in truck traffic near the project site or in the region, and therefore, an analysis of potential impacts from PM was not warranted.

### **SULFUR DIOXIDE**

SO<sub>2</sub> emissions are primarily associated with the combustion of sulfur-containing fuels (oil and coal). Monitored SO<sub>2</sub> concentrations in New York City are lower than the national standards. Due to the federal restrictions on the sulfur content in diesel fuel for on-road vehicles, no significant quantities are emitted from vehicular sources. Vehicular sources of SO<sub>2</sub> are not significant and therefore, an analysis of SO<sub>2</sub> from mobile sources was not warranted.

As part of the proposed project, natural gas would be burned in the proposed HVAC systems. The sulfur content of natural gas is negligible; therefore, no analysis was performed to estimate the future levels of SO<sub>2</sub> with the proposed school.

## AIR TOXICS

In addition to the criteria pollutants discussed above, air toxics are of concern. Air toxics are emitted by a wide range of man-made and naturally occurring sources. Emissions of air toxics from industries are regulated by EPA. Federal ambient air quality standards do not exist for non-criteria air toxics; however, the New York State Department of Environmental Conservation (NYSDEC) has issued standards for certain non-criteria compounds, including beryllium, gaseous fluorides, and hydrogen sulfide. NYSDEC has also developed guideline concentrations for numerous air toxic compounds. The NYSDEC guidance document DAR-1 (September 2007) contains a compilation of annual and short term (1-hour) guideline concentrations for these compounds. The NYSDEC guidance thresholds represent ambient levels that are considered safe for public exposure.

The potential impact from nearby industrial sources of air toxics on the proposed school was assessed.

## C. AIR QUALITY REGULATIONS, STANDARDS, AND BENCHMARKS

### NATIONAL AND STATE AIR QUALITY STANDARDS

As required by the CAA, primary and secondary National Ambient Air Quality Standards (NAAQS) have been established for six major air pollutants: CO, NO<sub>2</sub>, ozone, respirable PM (both PM<sub>2.5</sub> and PM<sub>10</sub>), SO<sub>2</sub>, and lead. The primary standards represent levels that are requisite to protect the public health, allowing an adequate margin of safety. The secondary standards are intended to protect the nation's welfare, and account for air pollutant effects on soil, water, visibility, materials, vegetation, and other aspects of the environment. The primary and secondary standards are the same for NO<sub>2</sub>, ozone, lead, and PM, and there is no secondary standard for CO. The NAAQS are presented in Table 7-1. The NAAQS for CO, NO<sub>2</sub>, and SO<sub>2</sub> have also been adopted as the ambient air quality standards for New York State, but are defined on a running 12-month basis rather than for calendar years only. New York State also has standards for total suspended particulate matter (TSP), settleable particles, non-methane hydrocarbons (NMHC), and ozone which correspond to federal standards that have since been revoked or replaced, and for beryllium, fluoride, and hydrogen sulfide (H<sub>2</sub>S).

EPA has revised the NAAQS for PM, effective December 18, 2006. The revision included lowering the level of the 24-hour PM<sub>2.5</sub> standard from 65 µg/m<sup>3</sup> to 35 µg/m<sup>3</sup> and retaining the level of the annual standard at 15 µg/m<sup>3</sup>. The PM<sub>10</sub> 24-hour average standard was retained and the annual average PM<sub>10</sub> standard was revoked. EPA has also revised the 8-hour ozone standard, lowering it from 0.08 to 0.075 parts per million (ppm), effective in May 2008.

On May 20, 2008, EPA proposed to revise the primary and secondary standards for lead within the range of 0.10 to 0.30 µg/m<sup>3</sup>. With regard to the averaging time and form of the standard, EPA proposed two options: to retain the current averaging time of a calendar quarter and the current not-to-be exceeded form, revised to apply across a 3-year span; or to revise the averaging time to a calendar month and the form to the second-highest monthly average across a 3-year span. EPA is proposing that the current lead NAAQS remain in place for one year following the effective date of attainment designations for any new or revised NAAQS before being revoked, except in current non-attainment areas, where the existing NAAQS will not be revoked until the affected area submits, and EPA approves, an attainment demonstration for the revised lead NAAQS. The revised standards are expected to be finalized by September 15, 2008.

**Table 7-1  
National Ambient Air Quality Standards (NAAQS)**

Pollutant	Primary		Secondary	
	ppm	$\mu\text{g}/\text{m}^3$	ppm	$\mu\text{g}/\text{m}^3$
<b>Carbon Monoxide (CO)</b>				
8-Hour Average <sup>(1)</sup>	9	10,000	None	
1-Hour Average <sup>(1)</sup>	35	40,000		
<b>Lead</b>				
3-Month Average <sup>(5)</sup>	NA	1.5	NA	1.5
<b>Nitrogen Dioxide (NO<sub>2</sub>)</b>				
Annual Average	0.053	100	0.053	100
<b>Ozone (O<sub>3</sub>)</b>				
8-Hour Average <sup>(2)</sup>	0.075	150	0.075	150
<b>Respirable Particulate Matter (PM<sub>10</sub>)</b>				
24-Hour Average <sup>(1)</sup>	NA	150	NA	150
<b>Fine Respirable Particulate Matter (PM<sub>2.5</sub>)</b>				
Average of 3 Annual Means	NA	15	NA	15
24-Hour Average <sup>(3,4)</sup>	NA	35	NA	35
<b>Sulfur Dioxide (SO<sub>2</sub>)</b>				
Annual Arithmetic Mean	0.03	80	NA	NA
Maximum 24-Hour Average <sup>(1)</sup>	0.14	365	NA	NA
Maximum 3-Hour Average <sup>(1)</sup>	NA	NA	0.50	1,300
<p><b>Notes:</b>  ppm – parts per million  <math>\mu\text{g}/\text{m}^3</math> – micrograms per cubic meter  NA – not applicable  All annual periods refer to calendar year.  PM concentrations (including lead) are in <math>\mu\text{g}/\text{m}^3</math> since ppm is a measure for gas concentrations. Concentrations of all gaseous pollutants are defined in ppm and approximately equivalent concentrations in <math>\mu\text{g}/\text{m}^3</math> are presented.  <sup>(1)</sup> Not to be exceeded more than once a year.  <sup>(2)</sup> 3-year average of the annual fourth highest daily maximum 8-hr average concentration. EPA has reduced these standards down from 0.08 ppm, effective May 27, 2008.  <sup>(3)</sup> Not to be exceeded by the annual 98th percentile when averaged over 3 years.  <sup>(4)</sup> EPA has reduced these standards down from 65 <math>\mu\text{g}/\text{m}^3</math>, effective December 18, 2006.  <sup>(5)</sup> EPA has proposed to lower these standards to a range of 0.1 – 0.3 <math>\mu\text{g}/\text{m}^3</math>, which is expected to be finalized by September 15, 2008.</p>				
<p><b>Source:</b> 40 CFR Part 50: National Primary and Secondary Ambient Air Quality Standards.</p>				

### NAAQS ATTAINMENT STATUS AND STATE IMPLEMENTATION PLANS

The CAA, as amended in 1990, defines non-attainment areas (NAA) as geographic regions that have been designated as not meeting one or more of the NAAQS. When an area is designated as non-attainment by EPA, the state is required to develop and implement a State Implementation

Plan (SIP), which delineates how a state plans to achieve air quality that meets the NAAQS under the deadlines established by the CAA.

In 2002, EPA re-designated New York City as in attainment for CO. The CAA requires that a maintenance plan ensure continued compliance with the CO NAAQS for former non-attainment areas. New York City is also committed to implementing site-specific control measures throughout the city to reduce CO levels, should unanticipated localized growth result in elevated CO levels during the maintenance period.

On December 17, 2004, EPA took final action designating the five New York City counties, Nassau, Suffolk, Rockland, Westchester, and Orange counties as a PM<sub>2.5</sub> non-attainment area under the CAA due to exceedance of the annual average standard. New York State has submitted a draft SIP to EPA, dated April 2008, designed to meet the annual average standard by April 8, 2010, which will be finalized after public review.

As described above, EPA has revised the 24-hour average PM<sub>2.5</sub> standard. According to a preliminary analysis of monitoring data, there will be nonattainment areas for the revised standards. New York's recommendations for nonattainment areas for the revised standard were submitted to EPA in December 2007. The State recommended that the New York City Metropolitan Area be designated as nonattainment with the 2006 24-hour PM<sub>2.5</sub> NAAQS and the boundary of the nonattainment area be the same 10-county area EPA designated as nonattainment with the 1997 annual PM<sub>2.5</sub> NAAQS. After EPA's designation of the nonattainment areas is finalized, expected in December 2008, a three-year time period will begin within which New York will be required to submit a SIP for those areas that are not in attainment with the 2006 24-hour standard.

Nassau, Rockland, Suffolk, Westchester, Lower Orange County Metropolitan Area (LOCMA), and the five New York City counties had been designated as a severe non-attainment area for ozone 1-hour standard. In November 1998, New York State submitted its *Phase II Alternative Attainment Demonstration for Ozone*, which was finalized and approved by EPA effective March 6, 2002, addressing attainment of the 1-hour ozone NAAQS by 2007. These SIP revisions included additional emission reductions that EPA requested to demonstrate attainment of the standard, and an update of the SIP estimates using the latest versions of the mobile source emissions model, MOBILE6.2, and the nonroad emissions model, NONROAD—which have been updated to reflect current knowledge of engine emissions and the latest mobile and nonroad engine emissions regulations.

On April 15, 2004, EPA designated these same counties as moderate non-attainment for the 8-hour ozone standard which became effective as of June 15, 2004 (LOCMA was moved to the Poughkeepsie moderate non-attainment area for 8-hour ozone). EPA revoked the 1-hour standard on June 15, 2005; however, the specific control measures for the 1-hour standard included in the SIP are required to stay in place until the 8-hour standard is attained. The discretionary emissions reductions in the SIP would also remain but could be revised or dropped based on modeling. On February 8, 2008, NYSDEC submitted final revisions to a new SIP for ozone to EPA. NYSDEC has determined that achieving attainment for ozone before 2012 is unlikely, and has therefore made a request for a voluntary reclassification of the New York nonattainment area as "serious".

In March 2008 EPA strengthened the 8-hour ozone standards. EPA expects designations to take effect no later than March 2010 unless there is insufficient information to make these

designation decisions. In that case, EPA will issue designations no later than March 2011. SIPs would be due three years after the final designations are made.

#### **DETERMINING THE SIGNIFICANCE OF AIR QUALITY IMPACTS**

The State Environmental Quality Review Act (SEQRA) regulations and the City *Environmental Quality Review (CEQR) Technical Manual* state that the significance of a likely consequence (i.e., whether it is material, substantial, large or important) should be assessed in connection with its setting (e.g., urban or rural), its probability of occurrence, its duration, its irreversibility, its geographic scope, its magnitude, and the number of people affected.<sup>1</sup> In terms of the magnitude of air quality impacts, any action predicted to increase the concentration of a criteria air pollutant to a level that would exceed the concentrations defined by the NAAQS (see Table 7-1) would be deemed to have a potential significant adverse impact. In addition, in order to maintain concentrations lower than the NAAQS in attainment areas, or to ensure that concentrations will not be significantly increased in non-attainment areas, threshold levels have been defined for certain pollutants; any action predicted to increase the concentrations of these pollutants above the thresholds would be deemed to have a potential significant adverse impact, even in cases where violations of the NAAQS are not predicted.

#### **D. METHODOLOGY FOR PREDICTING POLLUTANT CONCENTRATIONS**

##### **MOBILE SOURCE ANALYSIS**

The prediction of vehicle-generated concentrations in an urban environment incorporates meteorological phenomena, traffic conditions, and physical configurations. Air pollutant dispersion models mathematically simulate how traffic, meteorology, and geometry combine to affect pollutant concentrations. The mathematical expressions and formulations contained in the various models attempt to describe an extremely complex physical phenomenon as closely as possible. However, because all models contain simplifications and approximations of actual conditions and interactions and it is necessary to predict the reasonable worst case condition, most of these dispersion models predict conservatively high concentrations of pollutants, particularly under adverse meteorological conditions.

The mobile source analysis for the proposed project employs a model approved by EPA that has been widely used for evaluating air quality impacts of projects in New York City, other parts of New York State, and throughout the country. The modeling approach includes a series of conservative assumptions relating to meteorology, traffic, and background concentration levels resulting in a conservatively high estimate of expected pollutant concentrations that could ensue from the proposed project.

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<sup>1</sup> *CEQR Technical Manual*, section 222, 2001; and State Environmental Quality Review Act § 617.7

### *DISPERSION MODEL FOR MICROSCALE ANALYSES*

Maximum CO concentrations adjacent to streets near the project site, resulting from vehicle emissions, were predicted using the CAL3QHC model Version 2.0.<sup>1</sup> The CAL3QHC model employs a Gaussian (normal distribution) dispersion assumption and includes an algorithm for estimating vehicular queue lengths at signalized intersections. CAL3QHC predicts emissions and dispersion of CO from idling and moving vehicles. The queuing algorithm includes site-specific traffic parameters, such as signal timing and delay calculations (from the 2000 *Highway Capacity Manual* traffic forecasting model), saturation flow rate, vehicle arrival type, and signal actuation (i.e., pre-timed or actuated signal) characteristics to accurately predict the number of idling vehicles. The CAL3QHC model has been updated with an extended module, CAL3QHCR, which allows for the incorporation of hourly meteorological data into the modeling, instead of worst-case assumptions regarding meteorological parameters. This refined version of the model, CAL3QHCR, is employed if maximum predicted future CO concentrations are greater than the applicable ambient air quality standards or when *de minimis* thresholds are exceeded using the first-level CAL3QHC modeling.

### *METEOROLOGY*

In general, the transport and concentration of pollutants from vehicular sources are influenced by three principal meteorological factors: wind direction, wind speed, and atmospheric stability. Wind direction influences the accumulation of pollutants at a particular prediction location (receptor), and atmospheric stability accounts for the effects of vertical mixing in the atmosphere.

Following the EPA guidelines,<sup>2</sup> CO computations were performed using a wind speed of 1 meter per second, a 1,000 meter mixing height and the neutral stability class D. Concentrations were calculated using a wind angle increment of 1 degree. The 8-hour average CO concentrations were estimated by multiplying the predicted 1-hour average CO concentrations by a factor of 0.70 to account for persistence of meteorological conditions and fluctuations in traffic volumes. A surface roughness of 3.21 meters was chosen and, in addition, a 43° Fahrenheit ambient temperature was assumed for the emissions computations. At each receptor location, the wind angle that maximized the pollutant concentrations was used in the analysis regardless of frequency of occurrence. These assumptions ensured that worst-case meteorology was used to estimate impacts.

### *ANALYSIS YEAR*

The CO microscale analyses were performed for 2012, the year by which the proposed project is likely to be completed. The future analysis was performed both without the proposed project (the No Build condition) and with the proposed project (the Build condition).

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<sup>1</sup> *User's Guide to CAL3QHC, A Modeling Methodology for Predicted Pollutant Concentrations Near Roadway Intersections*, Office of Air Quality, Planning Standards, EPA, Research Triangle Park, North Carolina, Publication EPA-454/R-92-006.

<sup>2</sup> *Guidelines for Modeling Carbon Monoxide from Roadway Intersections*, EPA Office of Air Quality Planning and Standards, Publication EPA-454/R-92-005.



### *VEHICLE EMISSIONS DATA*

Vehicular CO emission factors were computed using the EPA mobile source emissions model, MOBILE6.2.<sup>1</sup> This emissions model is capable of calculating engine emission factors for various vehicle types, based on the fuel (gasoline, diesel, or natural gas), meteorological conditions, vehicle speeds, vehicle age, roadway types, number of starts per day, and engine soak time, and various other factors that influence emissions, such as inspection maintenance programs. The inputs and use of MOBILE6.2 incorporates the most current guidance available from NYSDEC and DEP.

Appropriate credits were used to accurately reflect the New York State inspection and maintenance program, which requires inspections of automobiles and light trucks to determine if pollutant emissions from the vehicles' exhaust systems are below emission standards. Vehicles failing the emissions test must undergo maintenance and pass a repeat test to be registered in New York State.

Vehicle classification data were based on field studies conducted for the proposed project. The general categories of vehicle types for specific roadways were further categorized into subcategories based on their relative fleet-wide breakdown.

An ambient temperature of 43° F was used. The use of this temperature is recommended in the *CEQR Technical Manual* and is consistent with current DEP guidance.

### *TRAFFIC DATA*

Traffic data for the air quality analysis were derived from existing traffic counts, projected future growth in traffic, and other information developed as part of the traffic analysis for the proposed project (see Chapter 5, "Traffic"). Traffic data for the existing and future without and with the proposed project were employed in the respective air quality modeling scenarios. The weekday morning (7:30 to 8:30 AM) and evening (2:45 to 3:45 PM) peak periods were subjected to microscale analysis. These time periods were selected for the mobile source analysis because they produce the maximum anticipated project-generated traffic and therefore have the greatest potential for significant air quality impacts.

### *BACKGROUND CONCENTRATIONS*

Background concentrations are those pollutant concentrations originating from distant sources that are not directly included in the modeling analysis, which directly accounts for vehicular emissions on the streets within 1,000 feet and in the line of sight of the analysis site. Background concentrations must be added to modeling results to obtain total pollutant concentrations at an analysis site. The highest background concentrations monitored at the nearest NYSDEC background monitoring station in the most recent 3-year period were used. It was conservatively assumed that the maximum background concentrations occur on all days.

The 8-hour average CO background concentration used in this analysis was 2.0 ppm, which is based on the second-highest 8-hour measurements over the most recent 3-year period for which complete monitoring data is available (2005-2007) at the Queens College monitoring station.

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<sup>1</sup> EPA, User's Guide to MOBILE6.1 and MOBILE6.2: Mobile Source Emission Factor Model, EPA420-R-03-010, August 2003.

### *MOBILE SOURCE ANALYSIS SITE*

One intersection was selected for microscale analysis, at 57th Avenue at 74th Street. This intersection was selected because it is the location in the study area where the largest levels of project-generated traffic are expected at a signalized intersection, and due to the overall poor levels of service in the Build condition. Therefore, the greatest air quality impacts and maximum changes in the concentrations would be expected at this location.

### *RECEPTOR LOCATIONS*

Multiple receptors (i.e. precise locations at which concentrations are predicted) were modeled at the selected site; receptors were placed along the approach and departure links at spaced intervals. The receptors were placed at sidewalk or roadside locations with continuous public access at the selected intersection.

### **HVAC SOURCE SCREENING ANALYSIS**

To assess air quality impacts associated with emissions from the proposed school's HVAC systems, a screening analysis was performed. The methodology described in the *CEQR Technical Manual* was used for the analysis, which determines the threshold of development size below which the action would not have a significant adverse impact. The screening procedures utilize information regarding the type of fuel to be burned, the maximum development size, type of development, and the stack height, to evaluate whether a significant adverse impact is likely. Based on the distance from the development to the nearest building of similar or greater height, if the maximum development size is greater than the threshold size in the *CEQR Technical Manual*, there is the potential for significant adverse air quality impacts, and a refined dispersion modeling analysis would be required. Otherwise, the source passes the screening analysis, and no further analysis is required.

The project site was evaluated and any nearby building with sensitive uses of similar or greater height was analyzed as a potential receptor. The maximum development floor area of the site was used as input for the screening analysis. The proposed project would use natural gas in the HVAC system and the stack was assumed to be located three feet above the roof height (as per the *CEQR Technical Manual*).

### **INDUSTRIAL SOURCE SCREENING ANALYSIS**

#### *SCREENING ANALYSIS*

The potential impact of existing industrial operations in the surrounding area on pollutant concentrations in the area of the proposed project was analyzed. All industrial air pollutant emission sources within 400 feet of the project site were considered for inclusion in the air quality impact analyses, as recommended in the *CEQR Technical Manual*. The *CEQR Technical Manual* also requires an assessment of any actions that could result in the location of sensitive uses within 1,000 feet of a large emission source. No such sources of emissions were identified; therefore, the analysis focused on industrial sources within the 400 foot study area.

Land use and Sanborn maps were reviewed to identify potential sources of emissions from manufacturing/processing operations. Next, a field survey was conducted on June 3, 2008 to identify buildings within 400 feet of the project site that have the potential for emitting air pollutants. A list of eleven building addresses was submitted to the DEP Bureau of

Environmental Compliance (BEC), to obtain all the available certificates of operation, if any, for these locations and to determine whether manufacturing or industrial emissions occur at these locations. In addition, a search of Federal and State-permitted facilities within the study area was conducted using the EPA's Envirofacts database.<sup>1</sup>

After compiling the information on facilities with manufacturing or process operations in the study area, maximum potential pollutant concentrations from different sources, at various distances from the site, were estimated based on the screening database in the *CEQR Technical Manual*. The database provides factors for estimating maximum concentrations based on emissions levels at the source, which were derived from generic ISCST3 dispersion modeling for the New York City area. The distances from the source to the project site were determined based on the minimum distance between the property boundary of each source and the project site. Predicted worst-case impacts on the proposed project site were compared with the short-term guideline concentrations (SGCs) and annual guideline concentrations (AGCs) recommended in NYSDEC's DAR-1 AGC/SGC tables. These guidelines present the airborne concentrations which are applied as a screening threshold to determine if the future occupants of the proposed school could potentially be impacted by nearby sources of air pollution.

To assess the effects of multiple sources emitting the same pollutant, cumulative source impacts were determined. Concentrations of the same pollutant from industrial sources that were within 400 feet of the project site were combined and compared to the guideline concentrations discussed above.

#### *DISPERSION MODELING*

Since a potential exceedance of the NYSDEC guideline concentrations at the project site was predicted in the industrial source screening analysis described above due to one of the identified sources, refined dispersion modeling was required. The refined modeling analysis was performed using the EPA/AMS AERMOD dispersion model. The AERMOD model calculates pollutant concentrations from one or more points (e.g., exhaust stacks) based on emission rates, source parameters and hourly meteorological data, stack tip downwash, urban dispersion and surface roughness length, and elimination of calms. The meteorological data set consisted of five years of meteorological data: surface data collected at LaGuardia Airport (2003–2007) and concurrent upper air data collected at Brookhaven, Suffolk County, New York.

Discrete receptors (i.e., locations at which concentrations were calculated) were placed on the potentially affected proposed project. The receptor network consisted of receptors located at spaced intervals along the sides of the building from the ground floor to the upper level and at other publicly accessible ground level locations.

Emission rates and stack parameters, obtained from the NYCDEP permits, were input into the AERMOD dispersion model.

Predicted worst-case impacts were compared with the short-term and annual guideline concentrations (SGCs and AGCs) recommended in *NYSDEC's DAR-1 AGC/SGC Tables*.<sup>2</sup> These guideline concentrations are applied as screening thresholds to determine if the proposed project could be significantly impacted by nearby air pollution sources.

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<sup>1</sup> [http://oaspub.epa.gov/enviro/ef\\_home2.air](http://oaspub.epa.gov/enviro/ef_home2.air)

<sup>2</sup> NYSDEC Division of Air Resources, September 10, 2007.

## CHEMICAL SPILL ANALYSIS

### *INTRODUCTION*

Emissions from the proposed school's fume hood exhaust system, in the event of an accidental chemical spill in a laboratory, were analyzed. Impacts were evaluated using information, procedures, and methodologies contained in the *CEQR Technical Manual*. Maximum concentrations were compared to the short-term exposure levels (STELs) or to the ceiling levels recommended by the U.S. Occupational Safety and Health Administration (OSHA) for the chemicals examined. It is assumed that the types and quantities of materials that are to be used in the proposed school facility are those typically used in school science laboratories at New York City Department of Education schools.

The following section details the expected usage of potentially hazardous materials, as well as the systems that would be employed at the proposed school to ensure the safety of the students, staff, and the surrounding community in the event of an accidental chemical spill in the science laboratories. A quantitative analysis employing mathematical modeling was performed to determine potential impacts on nearby places of public access (dispersion modeling) and potential impacts due to recirculation into school's air intake systems (recirculation modeling).

### *LABORATORY FUME HOOD EXHAUSTS*

All school laboratories in which hazardous chemicals would be used will be equipped with fume hoods. Fume hoods are enclosures that are maintained under negative pressure and continuously vented to the outside. Their function is to protect teachers, staff, and students from potentially harmful fumes. By providing a continuous exhaust from laboratory rooms, they also prevent any fumes released within the laboratory from escaping into other areas of the building, or through windows to the outside.

Since design information is not yet available on the fume hood exhaust system for the proposed school facility, a set of conservative assumptions was used. The fume hood exhausts would likely be combined and vented to the mechanical room roof through a single stack; however, the worst-case analysis assumed a single fume hood vented separately to the roof. The fume hood exhaust stack height was conservatively assumed to be 3 feet above the roof. An exhaust fan sufficient to maintain a minimum exit velocity of 1,500 feet per minute through a 12-inch diameter stack discharge was assumed, as was a 1.11 square meter lab spill area.

### *PLANNED OPERATIONS*

An inventory of chemicals that may be present in a typical laboratory in the proposed high school was examined. From the chemical inventory, 10 chemicals were selected for further examination, based on their toxicity and potential for air quality impacts. Common buffers, salts, enzymes, nucleotides, peptides, and other bio-chemicals were not considered in the analysis since they are not typically categorized as air pollutants. Nonvolatile chemicals (having a vapor pressure of less than 10 mm Hg) were excluded as well. Table 7-2 shows the hazardous chemicals selected. The vapor pressure shown for each chemical is a measure of the material's volatility—its tendency to evaporate, or to form fumes or vapors, which is a critical parameter in determining potential impacts from chemical spills. The exposure standards (OSHA permissible exposure limit [PEL], National Institute for Occupational Safety and Health [NIOSH], immediately dangerous to life or health [IDLH], and OSHA and/or NIOSH short-term exposure level [STEL] and ceiling values) are measures of the material's toxicity—more toxic substances have lower exposure standards.

Table 7-2

**Expected Hazardous Materials in the Proposed Laboratories**

Chemical [CAS #]	Vapor Pressure mm Hg	PEL PPM	STEL PPM	IDLH PPM	Ceiling PPM
Acetic Acid [64-19-7]	11	10	15	50	10
Acetone [67-64-1]	180	1,000	-	2,500	250
Cyclohexene [110-83-8]	67	300	-	2000	300
Ether [60-29-7]	440	400	-	1,900	-
Ethyl Alcohol [64-17-5]	44	1,000	-	3,300	1,000
Hydrofluoric Acid [7664-39-3]	25	3	-	30	6
Methyl Alcohol [67-56-1]	96	200	250	6,000	200
Nitric Acid [7697-37-2]	48	2	4	25	2
Petroleum distillates (Naphtha) [80002-05-9]	40	500	-	1,100	1,800
Toluene [108-88-3]	21	200	150	500	300

**Notes:**  
 PEL—Permissible Exposure Limit; Time Weighted Average (TWA) for up to a 10-hour workday during a 40-hour workweek.  
 STEL—Short-Term Exposure Limit is a 15-minute TWA exposure that should not be exceeded at any time during a workday.  
 IDLH—Immediately Dangerous to Life or Health.  
 Ceiling—Level set by NIOSH or OSHA not to be exceeded in any working exposure.  
 PPM = parts per million.  
 Where a hyphen (-) appears there is no recommended corresponding guideline value.

#### *ESTIMATES OF WORST-CASE EMISSION RATES*

The dispersion of hazardous chemicals from a spill within a proposed laboratory was analyzed to assess the potential for exposure of the general public and of students and staff within the school to hazardous fumes in the event of an accident. Evaporation rates for volatile hazardous chemicals expected to be used in the proposed laboratories were estimated using the model developed by the Shell Development Company<sup>1</sup>. The Shell model, which was developed specifically to assess air quality impacts from chemical spills, calculates evaporation rates based on physical properties of the material, temperature, and rate of air flow over the spill surface. Room temperature conditions (20° C) and an air-flow rate of 0.5 meters/second were assumed for calculating evaporation rates.

Based on relative STELs and the vapor pressures of the chemical listed in Table 7-2, the most potentially hazardous chemical, shown in Table 7-3, was selected for the “worst-case” spill analysis. Besides the relative toxicities, other factors such as molecular weight, container size, and frequency of use were also considered. Chemicals with high vapor pressures evaporate most rapidly. The chemical selected also has the lowest STEL. Since the chemical selected for the detailed analysis is most likely to have a relatively higher emission rate and the lowest exposure standards, if the analysis of this chemical resulted in no significant impacts, it would indicate that the other chemicals listed in Table 7-2 would also not present any potential for significant impacts.

<sup>1</sup> Fleischer, M.T., An Evaporation/Air Dispersion Model for Chemical Spills on Land, Shell Development Company, December 1980.

**Table 7-3**  
**Chemicals Selected for Worst-Case Spill Analysis**

Chemical	Quantity (liters)	Evaporation Rate (gram/meter <sup>2</sup> /sec)	Emission Rate* (gram/sec)
Nitric Acid	0.17	0.26	0.29
Note: * Average emission rate			

The analysis conservatively assumes that a full container of the chemical would be spilled in a fume hood. For a spill area of approximately 1.1 square meters, the emission rates were determined using the evaporation rates. For modeling purposes, the emission rate shown in Table 7-3 is calculated for a 15-minute time period. The vapor from the spill would be drawn into the fume hood exhaust system and released into the atmosphere via the roof exhaust fans. The high volume of air drawn through this system provides a high degree of dilution for hazardous fumes before they are released above the roof.

*RECIRCULATION MODELING*

The potential for recirculation of the fume hood emissions back into the building air intakes was assessed using the Wilson method<sup>1</sup>. This empirical procedure, which has been verified by both wind-tunnel and full-scale testing, is a refinement of the 1981 ASHRAE Handbook procedure, and takes into account such factors as plume momentum, stack-tip downwash, and cavity recirculation effects. The procedure determines the worst-case, absolute minimum dilution between exhaust vent and air intake. Three separate effects determine the eventual dilution: internal system dilution, obtained by combining exhaust streams (i.e., mixing in plenum chambers of multiple exhaust streams, introduction of fresh air supplied from roof intakes); wind dilution, dependent on the distance from vent to intake and the exit velocity; and dilution from the stack, caused by stack height and plume rise from vertical exhaust velocity. The critical wind speed for worst-case dilution is dependent on the exit velocity, the distance from vent to intake, and the cross-sectional area of the exhaust stack.

*DISPERSION MODELING*

The study performed also considered the impact of an accidental spill on nearby receptors, such as open windows on nearby buildings. Maximum concentrations at elevated receptors downwind of the fume exhausts were estimated using the EPA INPUFF model, version 2.0<sup>2</sup>. This is the only EPA model designed to estimate impacts from short-term releases and was used to develop the EPA guidelines<sup>3</sup>. INPUFF assumes a Gaussian dispersion of a pollutant "puff" (a brief release, as opposed to a continuous one) as it is transported downwind of a release point. Stable atmospheric conditions and a 1-meter/second wind speed were assumed. A series of elevated receptors were placed on the buildings to be analyzed. Since the emissions resulting from

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<sup>1</sup> D.J. Wilson, A Design Procedure for Estimating Air Intake Contamination from Nearby Exhaust Vents, ASHRAE TRAS 89, Part 2A, pp. 136-152, 1983.

<sup>2</sup> Peterson, W.B., A Multiple Source Gaussian Puff Dispersion Algorithm—Users Guide, EPA, 600/8-86-024, August 1986.

<sup>3</sup> EPA, Chemical Emergency Preparedness Program, Interim Guidance, November 1985.

chemical spills are short-term releases, a worst-case assumption of the wind blowing the exhaust directly to the window or air intake receptors was made for modeling purposes.

## E. PROBABLE IMPACTS OF THE PROPOSED PROJECT

### MOBILE SOURCE ANALYSIS

CO concentrations with the proposed project were determined for the 2012 analysis year using the methodology previously described. Table 7-4 shows the maximum predicted future 8-hour average CO concentrations with the proposed project at the intersection studied. (No 1-hour values are shown since no exceedances of the standard would occur and the *de minimis* criteria are only applicable to 8-hour concentrations. Therefore, the 8-hour values are the most critical for impact assessment.) The values shown are the highest predicted concentrations for the receptor locations for the time periods analyzed.

Table 7-4  
Future Maximum Predicted 8-Hour Average  
No Build and Build Carbon Monoxide Concentrations

Receptor Site	Location	Time Period	8-Hour Concentration (ppm)	
			No Build	Build
1	57th Avenue at 74th Street	AM/PM	2.6	2.6
Note: 8-hour standard is 9 ppm.				

The results indicate that the proposed project would not result in any violations of the CO standard or any significant impacts at the receptor location. In addition, the incremental increases in 8-hour average CO concentrations would be very small and, consequently, would not result in a violation of the CEQR *de minimis* CO criteria. (The *de minimis* criteria were previously described in section C of this chapter.) Therefore, the proposed project would not result in any significant adverse CO air quality impacts.

### STATIONARY SOURCE ANALYSIS

#### HVAC SYSTEM

The primary stationary source of air pollutants associated with the proposed school would be emissions from the combustion of natural gas by HVAC equipment. The primary pollutant of concern when burning natural gas is nitrogen dioxide (NO<sub>2</sub>).

The screening methodology in the *CEQR Technical Manual* was used for the analysis, with the total size of the proposed school in gross square feet and the use of natural gas as fuel. The development size used in the air quality analysis was 148,280 square feet. The nearest distance to a building of a similar or greater height was determined to be beyond 400 feet; therefore, this distance was chosen for the analysis in accordance with the *CEQR Technical Manual*. At this distance, the proposed project would not result in any significant stationary source air quality impacts since the proposed project would be below the maximum permitted development size derived from Figure 3Q-9 of the *CEQR Technical Manual*. Therefore, the proposed project would not result in any potential adverse air quality impacts from HVAC emission sources.

*INDUSTRIAL SOURCE ANALYSIS*

As discussed above, a study was conducted to identify manufacturing and industrial uses within 400 feet of the proposed school. A request for permit information for addresses identified was made to NYCDEP and the EPA Envirofacts database was searched for entries at those addresses.

Permit information was obtained for the facilities found in the study area. The emission rates from the analyzed permits and the distances of the sources to the proposed school were used in the screening analysis.

This screening analysis identified one business that could potentially have significant impacts on the proposed school. Therefore, refined dispersion modeling was performed for the pollutant emitted by this source.

Table 7-5 presents the potential maximum impacts from the industrial screening and detailed modeling at the proposed school. The table lists the highest calculated SGC and AGC calculated for each toxic air pollutant. As shown in Table 7-5, the maximum predicted annual concentration of tetrachloroethylene from dry cleaner establishments exceeds the NYSDEC AGC of 1.0 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ). However, NYSDEC guidance interprets impacts of less than 10 times higher than the AGC for carcinogenic compounds that have a risk-based threshold (which includes tetrachloroethylene) as allowable, as long as best available control technology (BACT) is in place. The dry cleaner establishments that were analyzed are equipped with state-of-the-art controls designed to minimize the formation and emission of tetrachloroethylene vapors to the atmosphere, and clearly represents BACT. Since the predicted tetrachloroethylene impact is less than 10 times the annual threshold concentration, it is not considered to be significant. Therefore, based on the data available on the surrounding industrial uses, the proposed school would not experience significant air quality impacts from these facilities.

**Table 7-5**  
**Pollutant Concentrations Resulting from Sources With BEC Permits**

Potential Contaminants	Estimated Short-term Impact ( $\mu\text{g}/\text{m}^3$ )	SGC <sup>a</sup> ( $\mu\text{g}/\text{m}^3$ )	Estimated Long-term Impact ( $\mu\text{g}/\text{m}^3$ )	AGC <sup>a</sup> ( $\mu\text{g}/\text{m}^3$ )
Tetrachloroethylene	457.43	1,000	6.51	1.0
Particulate Matter	1.52	380	0.002	45
Isopropyl Alcohol	147.72	98,000	0.24	7,000

**Notes:**  
<sup>a</sup> NYSDEC DAR-1 (Air Guide-1) AGC/SGC Tables, September, 2007.  
 AGC-Annual Guideline Concentrations.  
 SGC-Short-term Guideline Concentrations.

**CHEMICAL SPILL ANALYSIS**

*RECIRCULATION ANALYSIS*

Assuming a 3-foot high 12-inch diameter stack and an exhaust velocity of 1,500 feet per minute, the recirculation analysis indicates that the minimum potential dilution factor between the fan exhausts and the nearest air intake is over 204 (i.e., pollutant concentrations at the nearest intake to the exhaust fan would be 1/204th the concentration at the fan). Thus, a nitric acid spill in a fume hood as described above would produce a maximum concentration at the nearest intake location of about 0.99 parts per million (ppm).



The results of the recirculation analysis are presented in Table 7-6. The results indicate that a spill in a fume hood as described above would produce a maximum concentration at the nearest intake location below the corresponding STELs set by OSHA and/or NIOSH for any of the chemicals in Table 7-2

**Table 7-6**  
**Fume Hood Recirculation Analysis**  
**Maximum Predicted Concentration (ppm)**

Chemical	STEL	15-Minute Average
Nitric Acid	2	0.99

#### *DISPERSION ANALYSIS*

The results of the analysis of emissions from the proposed school's fume hood exhaust system are shown below in Table 7-7. The maximum concentration at elevated receptors downwind of the fume hood exhausts was estimated using the methodology previously described, and was determined to be well below the STEL levels. As shown, the maximum concentrations found at the receptor of highest impact would be lower than the corresponding impact thresholds. Therefore, there would be no significant impact on air quality from potential spills in the school laboratory hoods.

**Table 7-7**  
**Maximum Predicted Concentration (ppm)**

Chemical	STEL	15-Minute Average
Nitric Acid	2	0.01

\*

## A. INTRODUCTION

The proposed school would not generate sufficient traffic to have the potential to cause a significant noise impact (i.e., it would not result in a doubling of passenger car equivalents [PCEs] which would be necessary to cause a 3 dBA increase in noise levels). The principal effects of the proposed school on ambient noise levels would result from the use of the proposed school's playground. An analysis of these potential impacts is presented, along with an analysis to determine the level of building attenuation necessary to ensure that interior noise levels satisfy applicable interior noise criteria.

## B. NOISE FUNDAMENTALS

Quantitative information on the effects of airborne noise on people is well documented. If sufficiently loud, noise may adversely affect people in several ways. For example, noise may interfere with human activities, such as sleep, speech communication, and tasks requiring concentration or coordination. It may also cause annoyance, hearing damage, and other physiological problems. Although it is possible to study these effects on people on an average or statistical basis, it must be remembered that all the stated effects of noise on people vary greatly with the individual. Several noise scales and rating methods are used to quantify the effects of noise on people. These scales and methods consider such factors as loudness, duration, time of occurrence, and changes in noise level with time.

### “A”-WEIGHTED SOUND LEVEL (DBA)

Noise is typically measured in units called decibels (dB), which are ten times the logarithm of the ratio of the sound pressure squared to a standard reference pressure squared. Because loudness is important in the assessment of the effects of noise on people, the dependence of loudness on frequency must be taken into account in the noise scale used in environmental assessments. Frequency is the rate at which sound pressures fluctuate in a cycle over a given quantity of time, and is measured in Hertz (Hz), where 1 Hz equals 1 cycle per second. Frequency defines sound in terms of pitch components. One of the simplified scales that accounts for the dependence of perceived loudness on frequency is the use of a weighting network known as A-weighting in the measurement system, to simulate response of the human ear. For most noise assessments the A-weighted sound pressure level in units of dBA is used in view of its widespread recognition and its close correlation with perception. In this analysis, all measured noise levels are reported in dBA or A-weighted decibels. Common noise levels in dBA are shown in Table 8-1.

**Table 8-1  
Common Noise Levels**

Sound Source	(dBA)
Military jet, air raid siren	130
Amplified rock music	110
Jet takeoff at 500 meters	100
Freight train at 30 meters	95
Train horn at 30 meters	90
Heavy truck at 15 meters	80
Busy city street, loud shout	80
Busy traffic intersection	70
Highway traffic at 15 meters, train	70
Predominantly industrial area	60
Light car traffic at 15 meters, city or commercial areas or residential areas close to industry	50
Background noise in an office	50
Suburban areas with medium density transportation	40
Public library	40
Soft whisper at 5 meters	30
Threshold of hearing	0

**Note:** A 10 dBA increase in level appears to double the loudness, and a 10 dBA decrease halves the apparent loudness.

**Source:** Cowan, James P. Handbook of Environmental, Acoustics. Van Nostrand Reinhold, New York, 1994.  
Egan, M. David, Architectural Acoustics. McGraw-Hill Book Company, 1988.

**COMMUNITY RESPONSE TO CHANGES IN NOISE LEVELS**

The average ability of an individual to perceive changes in noise levels is well documented (see Table 8-2). Generally, changes in noise levels less than 3 dBA are barely perceptible to most listeners, whereas 10 dBA changes are normally perceived as doublings (or halvings) of noise levels. These guidelines permit direct estimation of an individual's probable perception of changes in noise levels.

**Table 8-2**  
**Average Ability to Perceive Changes in Noise Levels**

Change (dBA)	Human Perception of Sound
2-3	Barely perceptible
5	Readily noticeable
10	A doubling or halving of the loudness of sound
20	A dramatic change
40	Difference between a faintly audible sound and a very loud sound
Source: Bolt Beranek and Neuman, Inc., <i>Fundamentals and Abatement of Highway Traffic Noise</i> , Report No. PB-222-703. Prepared for Federal Highway Administration, June 1973.	

It is also possible to characterize the effects of noise on people by studying the aggregate response of people in communities. The rating method used for this purpose is based on a statistical analysis of the fluctuations in noise levels in a community, and integrates the fluctuating sound energy over a known period of time, most typically during 1 hour or 24 hours. Various government and research institutions have proposed criteria that attempt to relate changes in noise levels to community response. One commonly applied criterion for estimating this response is incorporated into the community response scale proposed by the International Standards Organization (ISO) of the United Nations (see Table 8-3). This scale relates changes in noise level to the degree of community response and permits direct estimation of the probable response of a community to a predicted change in noise level.

**Table 8-3**  
**Community Response to Increases in Noise Levels**

Change (dBA)	Category	Description
0	None	No observed reaction
5	Little	Sporadic complaints
10	Medium	Widespread complaints
15	Strong	Threats of community action
20	Very strong	Vigorous community action
Source: International Standards Organization, <i>Noise Assessment with Respect to Community Responses</i> , ISO/TC 43 (New York: United Nations, November 1969).		

### NOISE DESCRIPTORS USED IN IMPACT ASSESSMENT

Because the sound pressure level unit of dBA describes a noise level at just one moment and very few noises are constant, other ways of describing noise over extended periods have been developed. One way of describing fluctuating sound is to describe the fluctuating noise heard over a specific time period as if it had been a steady, unchanging sound. For this condition, a descriptor called the "equivalent sound level,"  $L_{eq}$ , can be computed.  $L_{eq}$  is the constant sound level that, in a given situation and time period (e.g., 1 hour, denoted by  $L_{eq(1)}$ , or 24 hours, denoted as  $L_{eq(24)}$ ), conveys the same sound energy as the actual time-varying sound. Statistical sound level descriptors such as  $L_1$ ,  $L_{10}$ ,  $L_{50}$ ,  $L_{90}$ , and  $L_x$ , are sometimes used to indicate noise levels that are exceeded 1, 10, 50, 90 and x percent of the time, respectively. Discrete event peak

levels are given as  $L_1$  levels.  $L_{eq}$  is used in the prediction of future noise levels, by adding the contributions from new sources of noise (i.e., increases in traffic volumes) to the existing levels and in relating annoyance to increases in noise levels.

The relationship between  $L_{eq}$  and levels of exceedance is worth noting. Because  $L_{eq}$  is defined in energy rather than straight numerical terms, it is not simply related to the levels of exceedance. If the noise fluctuates very little,  $L_{eq}$  will approximate  $L_{50}$  or the median level. If the noise fluctuates broadly, the  $L_{eq}$  will be approximately equal to the  $L_{10}$  value. If extreme fluctuations are present, the  $L_{eq}$  will exceed  $L_{90}$  or the background level by 10 or more decibels. Thus the relationship between  $L_{eq}$  and the levels of exceedance will depend on the character of the noise. In community noise measurements, it has been observed that the  $L_{eq}$  is generally between  $L_{10}$  and  $L_{50}$ . The relationship between  $L_{eq}$  and exceedance levels has been used in this analysis to characterize the noise sources and to determine the nature and extent of their impact at all receptor locations.

For the purposes of this project, the maximum 1-hour equivalent sound level ( $L_{eq(1)}$ ) has been selected as the noise descriptor to be used in the noise impact evaluation.  $L_{eq(1)}$  is the noise descriptor used in the City Environmental Quality Review (CEQR) standards for vehicular traffic noise impact evaluation, and is used to provide an indication of highest expected sound levels.  $L_{10(1)}$  is the noise descriptor used in the CEQR noise exposure standards for vehicular traffic noise. Hourly statistical noise levels (particularly  $L_{10}$  and  $L_{eq}$  levels) were used to characterize the relevant noise sources and their relative importance at each receptor location.

## C. NOISE STANDARDS AND CRITERIA

### NEW YORK CITY NOISE CODE

In December 2005 the New York City Noise Control Code was amended. The amended noise code contains: prohibitions regarding unreasonable noise; requirements for noise due to construction activities (including noise limits from specific pieces of construction equipment, noise limits on total construction noise, limits on hours of construction [weekdays between 7 AM and 6 PM], and requirements for adopting and implementing noise mitigation plans for each construction site prior to the start of construction); and specifies noise standards, including plainly audible criteria, for specific noise sources (i.e., refuse collection vehicles, air compressors, circulation devises, exhausts, paving breakers, commercial music, personal audio devises, sound reproduction devises, animals, motor vehicles including motorcycles and trucks, sound signal devises, burglar alarms, emergency signal devises, lawn care devises, snow blowers, etc.). In addition, the amended code specifies that that no sound source operating in connection with any commercial or business enterprise may exceed the decibel levels in the designated octave bands shown in Table 8-4 at the specified receiving properties.

**Table 8-4**  
**New York City Noise Codes**

Octave Band Frequency (Hz)	Maximum Sound Pressure Levels (dB) as Measured Within a Receiving Property as Specified Below	
	<i>Residential receiving property for mixed use building and residential buildings (as measured within any room of the residential portion of the building with windows open, if possible)</i>	<i>Commercial receiving property (as measured within any room containing offices within the building with windows open, if possible)</i>
31.5	70	74
63	61	64
125	53	56
250	46	50
500	40	45
1000	36	41
2000	34	39
4000	33	38
8000	32	37

Source: Section 24-232 of the Administrative Code of the City of New York, as amended December 2005.

### NEW YORK CEQR NOISE STANDARDS

The New York City Department of Environmental Protection (NYCDEP) has set external noise exposure standards. These standards are shown in Table 8-5 and 8-6. Noise Exposure is classified into four categories: acceptable, marginally acceptable, marginally unacceptable, and clearly unacceptable. The standards shown are based on maintaining an interior noise level for the worst-case hour  $L_{10}$  less than or equal to 45 dBA. Mitigation requirements are shown in Table 8-5.

In addition, the *CEQR Technical Manual* uses the following criteria to determine whether a proposed project would result in a significant adverse noise impact. The impact assessments compare the proposed project's Build condition  $L_{eq(1)}$  noise levels to those calculated for the No Build condition, for receptors potentially affected by the project.

If the No Build levels are less than 60 dBA  $L_{eq(1)}$  and the analysis period is not a nighttime period, the threshold for a significant impact would be an increase of at least 5 dBA  $L_{eq(1)}$ . For the 5 dBA threshold to be valid, the resultant Build condition noise level would have to be equal to or less than 65 dBA. If the No Build noise level is equal to or greater than 62 dBA  $L_{eq(1)}$ , or if the analysis period is a nighttime period (defined in the CEQR standards as being between 10 PM and 7 AM), the incremental significant impact threshold would be 3 dBA  $L_{eq(1)}$ . (If the No Build noise level is 61 dBA  $L_{eq(1)}$ , the maximum incremental increase would be 4 dBA, since an increase higher than this would result in a noise level higher than the 65 dBA  $L_{eq(1)}$  threshold.)

**Table 8-5  
Noise Exposure Guidelines  
For Use in City Environmental Impact Review<sup>1</sup>**

Receptor Type	Time Period	Acceptable General External Exposure	Airport <sup>3</sup> Exposure	Marginally Acceptable General External Exposure	Airport <sup>3</sup> Exposure	Marginally Unacceptable General External Exposure	Airport <sup>3</sup> Exposure	Clearly Unacceptable General External Exposure	Airport <sup>3</sup> Exposure
1. Outdoor area requiring serenity and quiet <sup>2</sup>		$L_{10} \leq 55$ dBA	Ldn $\leq 60$ dBA		60 < Ldn $\leq 65$ dBA		(1) 65 < Ldn $\leq 70$ dBA, (II) 70 $\leq$ Ldn		Ldn $\leq 75$ dBA
2. Hospital, Nursing Home		$L_{10} \leq 55$ dBA		$55 < L_{10} \leq 65$ dBA		$65 < L_{10} \leq 80$ dBA			
3. Residence, residential hotel or motel	7 AM to 10 PM	$L_{10} \leq 65$ dBA		$65 < L_{10} \leq 70$ dBA		$70 < L_{10} \leq 80$ dBA			
	10 PM to 7 AM	$L_{10} \leq 55$ dBA		$55 < L_{10} \leq 70$ dBA		$70 < L_{10} \leq 80$ dBA			
4. School, museum, library, court, house of worship, transient hotel or motel, public meeting room, auditorium, out-patient public health facility		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)			
5. Commercial or office		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)			
6. Industrial, public areas only <sup>4</sup>	Note 4	Note 4	Note 4	Note 4					

**Notes:**  
 (i) In addition, any new activity shall not increase the ambient noise level by 3 dBA or more;  
 Measurements and projections of noise exposures are to be made at appropriate heights above site boundaries as given by American National Standards Institute (ANSI) Standards; all values are for the worst hour in the time period.  
 2 Tracts of land where serenity and quiet are extraordinarily important and serve an important public need and where the preservation of these qualities is essential for the area to serve its intended purpose. Such areas could include amphitheatres, particular parks or portions of parks or open spaces dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet. Examples are grounds for ambulatory hospital patients and patients and residents of sanitariums and old-age homes.  
 3 One may use the FAA-approved L<sub>dn</sub> contours supplied by the Port Authority, or the noise contours may be computed from the federally approved INM Computer Model using flight data supplied by the Port Authority of New York and New Jersey.  
 4 External Noise Exposure standards for industrial areas of sounds produced by industrial operations other than operating motor vehicles or other transportation facilities are spelled out in the New York City Zoning Resolution, Sections 42-20 and 42-21. The referenced standards apply to M1, M2, and M3 manufacturing districts and to adjoining residence districts (performance standards are octave band standards).  
 Source: New York City Department of Environmental Protection (adopted policy 1983).

**Table 8-6  
Required Attenuation Values to Achieve Acceptable Interior Noise Levels**

	Marginally Acceptable	Marginally Unacceptable		Clearly Unacceptable		
Noise Level With Proposed Action	$65 < L_{10} \leq 70$	$70 < L_{10} \leq 75$	$75 < L_{10} \leq 80$	$80 < L_{10} \leq 85$	$85 < L_{10} \leq 90$	$90 < L_{10} \leq 95$
Attenuation*	25 dB(A)	(I) 30 dB(A)	(II) 35 dB(A)	(I) 40 dB(A)	(II) 45 dB(A)	(III) 50 dB(A)

**Note:** \* The above composite window-wall attenuation values are for residential dwellings. Commercial office spaces and meeting rooms would be 5 dB(A) less in each category. All the above categories require a closed window situation and hence an alternate means of ventilation.  
 Source: New York City Department of Environmental Protection

## IMPACT DEFINITION

For purposes of impact assessment, this report will utilize a relative noise impact criteria which considers project-related increases in  $L_{eq(1)}$  noise levels over future conditions without the project of greater than 5.0 dBA as significant impacts. The 5.0 dBA relative criteria is consistent with increases in noise levels that the public considers noticeable and likely to result in complaints. The  $L_{eq(1)}$  descriptor is used in this document to quantify and describe both playground and traffic noise.

## D. EXISTING NOISE LEVELS

Existing noise levels were measured for 20-minute periods during the two weekday peak hours—AM peak period (7:15-9:15 AM), and PM peak period (3:30-4:30 PM)—at three sensitive receptor locations around the project site. Site 1 was located on 74th Street between Grand Avenue and 57th Avenue. Site 2 was located on 57th Avenue between 74th Street and 73rd Place. Site 3 was located on 57th Avenue at 73rd Place. See Figure 8-1 for receptor locations.

The instrumentation used for the 20-minute noise measurements was a Brüel & Kjær Type 4189 ½-inch microphone connected to a Brüel & Kjær Model 2260 Type 1 (according to ANSI Standard S1.4-1983) sound level meter. This assembly was mounted at a height of 5 feet above the ground surface on a tripod and at least 6 feet away from any large sound-reflecting surface to avoid major interference with sound propagation. The meter was calibrated before and after readings with a Brüel & Kjær Type 4231 sound-level calibrator using the appropriate adaptor. Measurements at each location were made on the A-scale (dBA). The data were digitally recorded by the sound level meter and displayed at the end of the measurement period in units of dBA. Measured quantities included  $L_{eq}$ ,  $L_1$ ,  $L_{10}$ ,  $L_{50}$ , and  $L_{90}$ . A windscreen was used during all sound measurements except for calibration. All measurement procedures conformed with the requirements of ANSI Standard S1.13-1971 (R2005).

The results of the measurements of existing noise levels are summarized in Table 8-7.

**Table 8-7**  
**Existing Noise Levels (in dBA)**

Site	Measurement Location	Time	$L_{eq}$	$L_1$	$L_{10}$	$L_{50}$	$L_{90}$
1	74th Street between Grand Avenue and 57th Avenue	AM	68.2	77.5	70.9	65.4	60.3
		PM	66.4	76.5	69.2	63.0	58.7
2	57th Avenue between 74th Street and 73rd Place	AM	68.3	76.8	70.5	66.8	63.4
		PM	65.6	74.3	68.0	61.9	59.2
3	57th Avenue at 73rd Place	AM	65.1	74.3	68.1	61.4	59.5
		PM	65.4	74.2	70.0	60.4	55.1

Note: Field measurements were performed by AKRF, Inc. on April 8, 2008.

In terms of the CEQR criteria, the existing noise levels at all receptor sites would be in the “marginally unacceptable” category.



### E. NOISE FROM THE SCHOOL PLAYGROUND

Table 8-8 shows the maximum hourly playground boundary noise levels for the two time periods analyzed. These values are based upon measurements made at a series of New York City school playgrounds for the New York City School Construction Authority (SCA)<sup>1</sup>. Geometric spreading and the consequent dissipation of sound energy with increasing distance from the playground decreases noise levels at varying distances from the playground boundary.

**Table 8-8**  
**Maximum Hourly Playground Boundary  $L_{eq(t)}$  Noise Levels (dBA)**

Time Period	Elementary Schools	Intermediate Schools	High Schools
AM	69.3	64.9	68.2
PM	62.9	64.3	64.3

Sources: SCA Playground Noise Study, Allee King Rosen & Fleming, Inc., October 23, 1992.

A screening analysis was performed for the AM and PM peak periods at the selected noise receptor sites based upon the estimated playground noise levels for an elementary school shown in Table 8-9. Based upon measurements and acoustical principles, hourly noise levels were assumed to decrease by the following values at the specified distances from the playground boundary: 4.8 dBA at 20 feet, a 6.8 dBA at 30 feet, and 9.1 dBA at 40 feet. For all distances between 40 and 300 feet, a 4.5-dBA drop-off per doubling of distances from the playground boundary was assumed.

Table 8-9 shows the results of combining the projected playground noise levels with the measured existing levels.

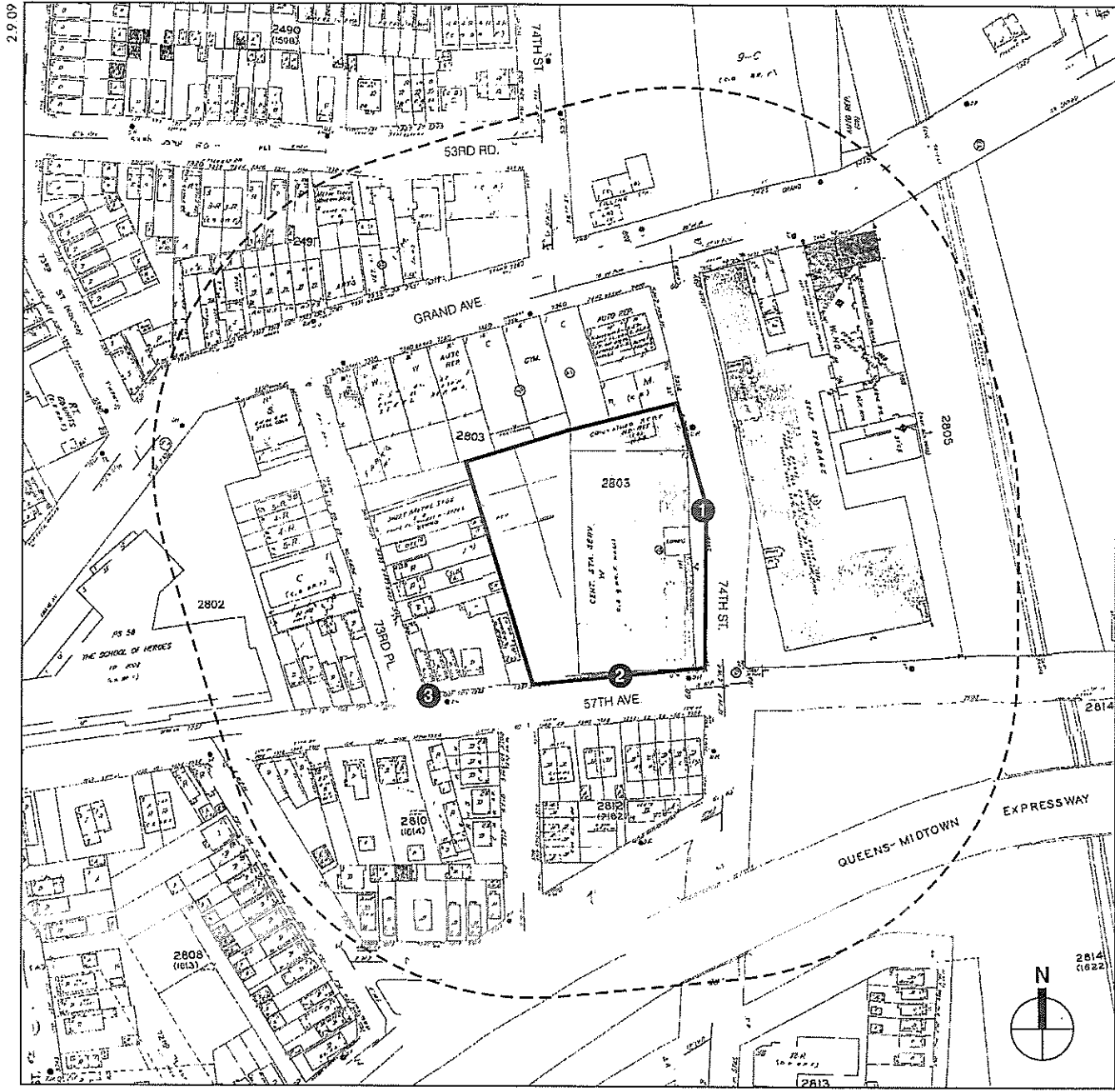
**Table 8-9**  
**Noise Levels due to School Playground (dBA)**




Site	Time	Existing $L_{eq}$	Playground $L_{eq}^*$	Distance (feet)	Playground $L_{eq}$ at Receptor	Combined $L_{eq}$	Change
1	AM	68.2	69.3	60	58.0	68.6	0.4
	PM	66.4	64.3	60	53.0	66.6	0.2
2	AM	68.3	69.3	55	57.7	68.7	0.4
	PM	65.6	64.3	55	52.7	65.8	0.2
3	AM	65.1	69.3	20	64.5	67.8	2.7
	PM	65.4	64.3	20	59.5	66.4	1.0

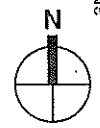
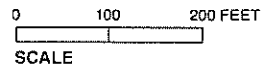
**Note:** To be conservative, the highest value between primary and Intermediate schools was used for each time period.  
**Source:** SCA Playground Noise Study, Allee King Rosen & Fleming, Inc., October 23, 1992.

The increases in noise level would all be less than 2.5 dB in magnitude, which would be barely perceptible and insignificant according to CEQR criteria. Therefore it can be concluded that the playground would have no significant impact on ambient noise levels in the area.

<sup>1</sup> SCA Playground Noise Study, Allee King Rosen & Fleming, Inc., October 23, 1992.



-  Project Site Boundary
-  Study Area Boundary (400-Foot Perimeter)
-  Noise Receptor Location



**Noise Receptor Locations**  
Figure 8-1

## F. NOISE ATTENUATION MEASURES

As shown in Table 8-1, the *CEQR Technical Manual* has set noise attenuation quantities for buildings, based on exterior  $L_{10(1)}$  noise levels, and in order to maintain interior noise levels of 45 dBA or lower. The building design includes the use of well-sealed, double-glazed windows, and central air conditioning (i.e., alternate means of ventilation). With these measures, the window/wall attenuation would provide more than 30 dBA for all facades of the building.

Based upon the  $L_{10(1)}$  values measured at the project site, these design measures would provide sufficient attenuation to achieve the CEQR requirements.

In addition, the building mechanical system (i.e., heating, ventilation, and air conditioning systems) would be designed to meet all applicable noise regulations and to avoid producing noise levels that would result in any significant increase in ambient levels. \*

**A. INTRODUCTION**

This chapter addresses soil and groundwater conditions at the project site resulting from previous and existing uses on the site.

To determine past and current uses on the site and adjacent area, a Phase I Environmental Site Assessment (ESA) was prepared by STV Incorporated (STV), Inc in March 2008. The Phase I ESA included: a site inspection, a review of the existing data on geology and hydrology of the area, a review of historical maps, local agency records, and other documents to assess past and current uses.

The Phase I ESA identified recognized environmental conditions (RECs) associated with the historic presence of nearby automobile service stations, dry cleaners, a salvage yard, manufacturing facilities, and a former gas manufacturing facility.

Based the Phase I ESA, further study in the form of a Phase II Environmental Site Investigation (ESI) was completed by STV in March 2008. The purpose of the Phase II ESI was to assess the RECs identified in the Phase I ESA. The Phase II ESI, described below, consisted of the collection and analysis of subsurface soil, soil vapor and ambient air samples.

As described in this chapter, elevated concentrations of petroleum-related volatile organic compounds (VOCs) and tetrachloroethene (PCE) are present in soil vapor and elevated concentrations of semi-volatile organic compounds (SVOCs) and metals are present in the soil. Therefore, certain measures—including proper management of excavated soils and appropriate health and safety measures—would be implemented during project construction. Further, certain design measures would be incorporated into the plans for the proposed building to prevent potential migration of organic vapors. Finally, for areas of the site where exposed soils may exist (i.e., landscaped areas), a 24-inch thick layer of environmentally clean fill would be placed over the soils.

With these measures in place, no significant adverse impacts due to the presence of hazardous and petroleum-contaminated materials would be expected to occur either during or following construction at the site.

**B. EXISTING CONDITIONS**

The project site is located on Block 2803, Lot 1 in Maspeth, Queens. The site is bounded by existing industrial and commercial buildings to the north, 74th Street to the east, 57th Avenue to the south, and existing residential buildings to the west. The project site is currently occupied by a vacant one-story, 52,100-sf industrial building. The project site is generally located in a mixed-use area containing commercial, industrial, manufacturing, and residential uses.

The Phase II ESI consisted of a geophysical survey to clear soil boring locations, the advancement of five soil borings, the collection of ten soil samples, the collection of five soil

vapor samples, and the collection of ambient air samples for laboratory analyses. Soil samples collected were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs), TCL semi-volatile organic compounds (SVOCs), Resource Conservation and Recovery Act (RCRA) metals, pesticides and polychlorinated biphenyls (PCBs). Soil vapor and ambient air samples were analyzed for VOCs utilizing United States Environmental Protection Agency (USEPA) Method TO-15.

The results of the soil samples revealed SVOCs [benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, and dibenzo(a,h)anthracene] exceeded the New York State Department of Environmental Conservation (NYSDEC) Technical and Administrative Guidance Memorandum (TAGM) Recommended Soil Cleanup Objectives (RSCOs) or NYSDEC Brownfield Cleanup Program (BCP) Soil Cleanup Objectives (SCOs) in five of ten soil samples. Additionally, RCRA metals (barium, chromium, lead, and mercury) exceeded NYSDEC TAGM Eastern USA Background or NYSDEC BCP SCOs in six of ten soil samples. These exceedances of SVOCs and metals are attributed to the presence of historic urban fill material that exist to a depth of 8 to 12 feet below ground surface (bgs). The deeper samples (below 8 to 12 feet bgs) had concentrations that were all below NYSDEC TAGM RSCOs or NYSDEC BCP SCOs.

Groundwater is located at least 24 feet bgs. No groundwater samples were taken as part of the Phase II ESI.

The laboratory analytical results for soil vapor were compared to anticipated background levels of indoor air and Air Guideline Values (AGVs) published in the New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006. Elevated concentrations of VOCs were found in soil vapor which exceeded NYSDOH Background Levels for indoor air. Most of the compounds are indicative of petroleum. Tetrachloroethene (PCE) was also detected at concentrations that were above NYSDOH Background Levels for indoor air, but below the NYSDOH Air Guidance Value (AGV). STV concluded that the elevated concentrations of VOCs in soil vapor are from off-site source areas identified in the Phase I ESA, given the low concentrations of VOCs in the soil samples. Analytical results for the ambient/outdoor air sample initially revealed one VOC, PCE, at a concentration above NYSDOH background ranges for outdoor air. As a result of this finding, additional outdoor air sampling was conducted and the samples were analyzed for PCE. The results indicated that the PCE concentrations were within the range of NYSDOH Background Levels for outdoor/ambient air. Therefore, the PCE concentration found in the initial round of outdoor air sampling is attributed to a transient condition and not normal ambient air conditions at the project site.

### **C. FUTURE WITHOUT THE PROPOSED PROJECT**

In the future without the proposed project the project site is expected to remain in its current condition.

### **D. FUTURE WITH THE PROPOSED PROJECT**

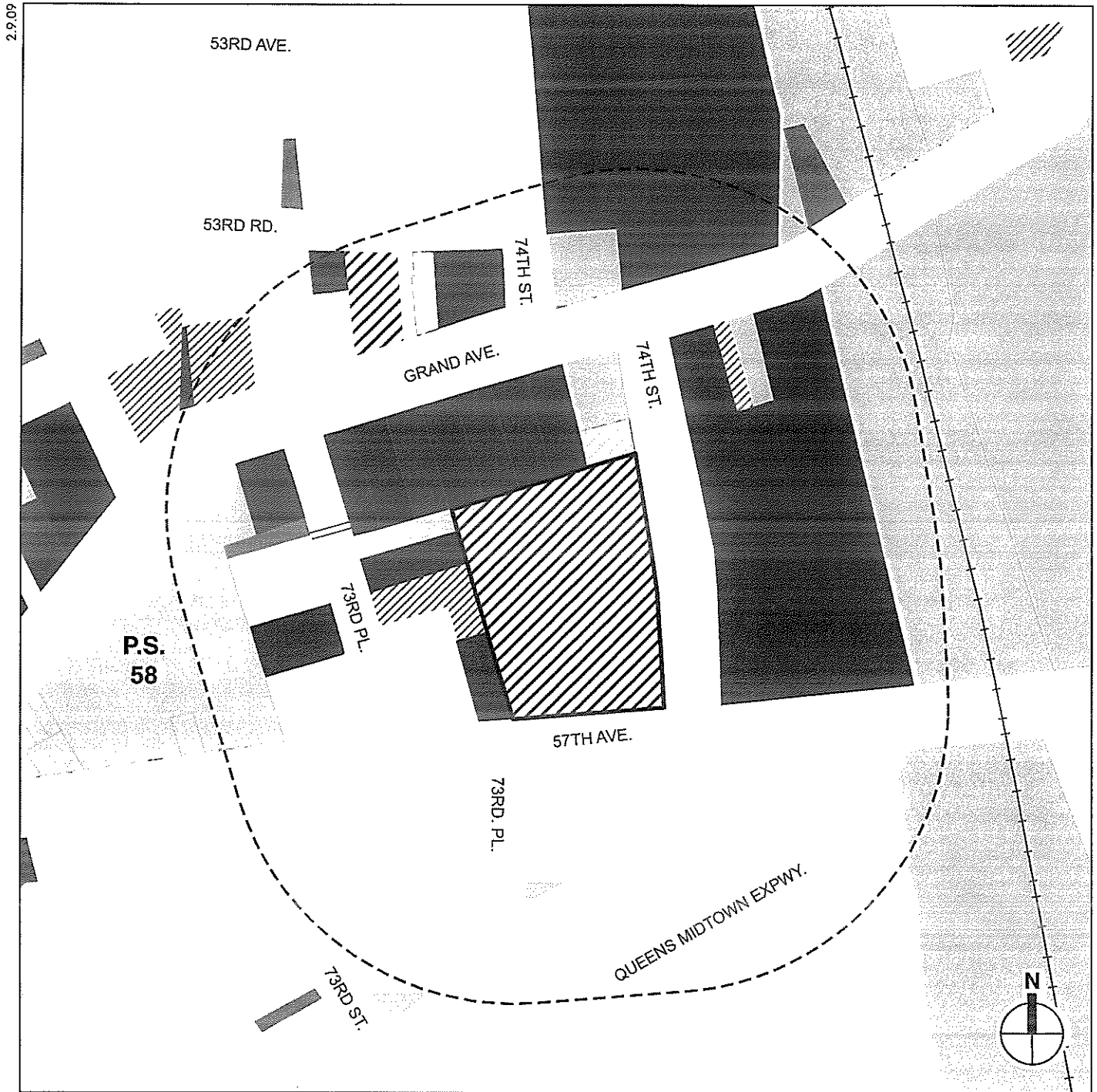
Since hazardous materials, including SVOCs, metals, and petroleum-based materials, are present on the site, the SCA would enact certain measures during construction including properly managing excavated soils in accordance with all applicable local, State and Federal regulations.

## Chapter 9: Soil and Groundwater Conditions

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
In addition, to minimize construction workers' exposure, standard industry practices, including an appropriate health and safety plan, would be utilized. If petroleum contaminated soil is encountered during construction, it would be excavated and disposed. Further, a vapor barrier and an active sub-slab depressurization system (SSDS) would be incorporated into the design of the proposed school building to prevent potential migration of organic vapors into the building. For areas of the project site where exposed soils may exist (i.e., landscaped areas) a 24-inch thick layer of certified-clean fill would be placed over the soils.


With these measures in place, no significant adverse impacts due to the presence of hazardous or petroleum-contaminated materials would be expected to occur either during or following construction at the site. \*




— Project Site Boundary


- - - Study Area Boundary  
(400-Foot Perimeter)

 Residential


 Residential with Commercial Below


 Hotels


 Commercial and Office Buildings


 Industrial and Manufacturing


 Transportation and Utility


 Public Facilities and Institutions

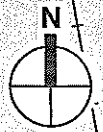
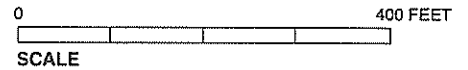
 Open Space and Outdoor Recreation

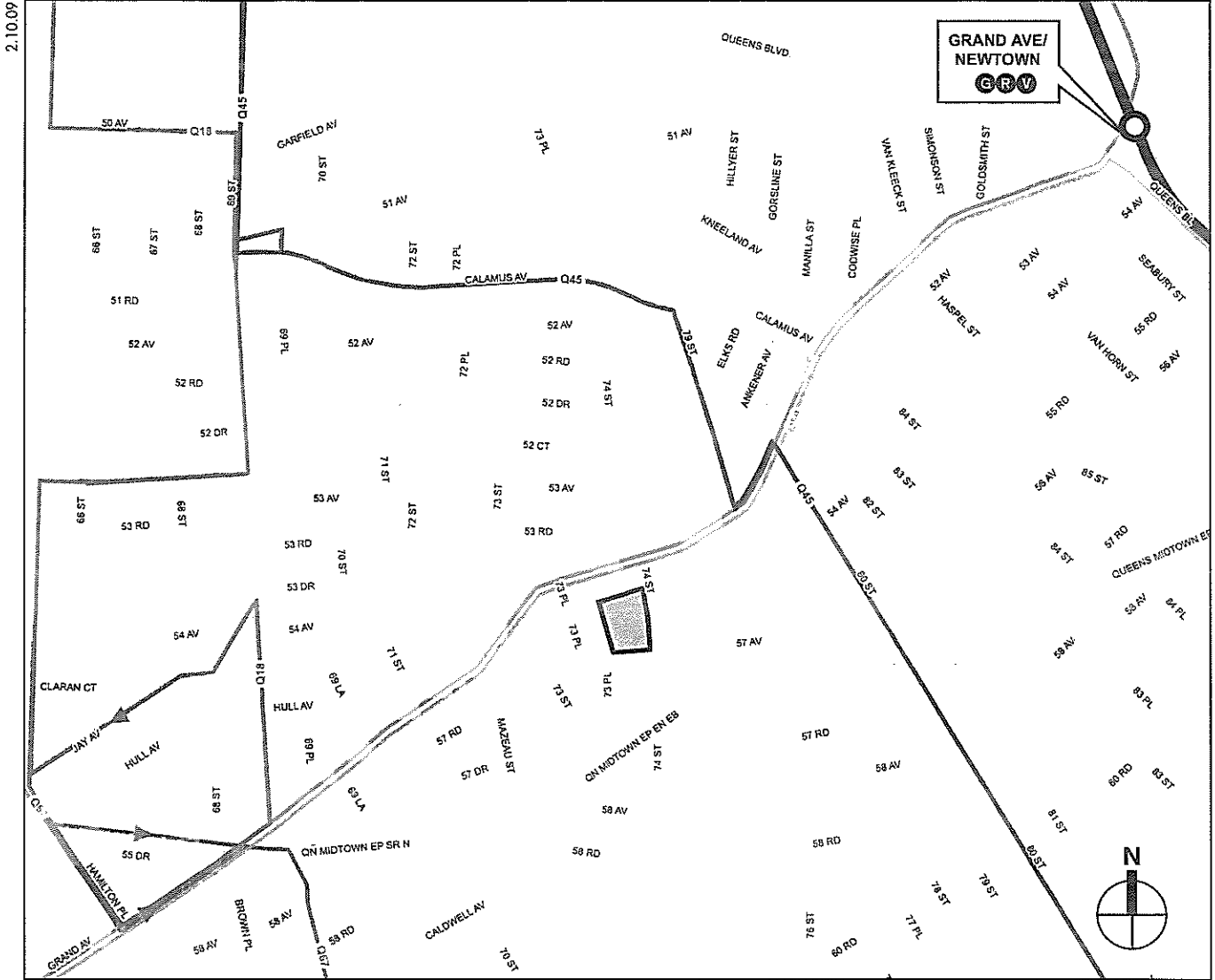
 Parking Facilities

 Vacant Land

 Vacant Building





 Under Construction





2.10.09

**GRAND AVE/  
NEWTOWN**  
G R V

-  Project Site
-  Bus Route
-  Subway Stop
-  Subway Line

0 1000 FEET  
SCALE

*NOTE: Distance between the subway station and the project site is approximately 0.8 miles.*



**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: \_\_\_\_\_

(PLEASE PRINT)

Name: Gregory P. Shaw

Address: 30-30 Thompson Ave NYC NY

I represent: NYC School Construction Authority

Address: 30-30 Thompson Ave NYC NY

**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

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I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Maspeth High School Date: 3/31/09

(PLEASE PRINT)

Name: Marge Kalb

Address: 48-27 64<sup>th</sup> St Woodside NY 11377

I represent: Comm School District 24 Presidents' Council

Address: \_\_\_\_\_

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THE CITY OF NEW YORK**

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in favor  in opposition

maspeth, High School Date: 3/31/09

(PLEASE PRINT)

Name: Jo Ann Berger

Address: 5819 166<sup>th</sup> St. Maspeth, N.Y. 11378

I represent: Parent of 3 Children in Day

Address: \_\_\_\_\_

Please complete this card and return to the Sergeant-at-Arms

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THE CITY OF NEW YORK**

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I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: \_\_\_\_\_

(PLEASE PRINT)

Name: Theresa Riley

Address: 58-44 Fl St Middle Village

I represent: JUNIPER CIVIC

Address: Middle Village

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THE CITY OF NEW YORK**

Appearance Card

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I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: 3/31/09

(PLEASE PRINT)

Name: Joyce Beaudoin

Address: 6155 77 Pl. Middle Village

I represent: JUNIPER PARK ASSN

Address: \_\_\_\_\_

**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

(with conditions) Date: 3/31/2009

(PLEASE PRINT)

Name: Gary Giordano

Address: \_\_\_\_\_

I represent: Community Board 5, Queens

Address: 61-23 Myrtle Av Glendale, NY 11385

**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. 1031

in favor  in opposition

Date: 3-31-09

(PLEASE PRINT)

Name: EDDIE NUBEL  
Address: 58-19 74TH ST. MIDDLE VILLAGE NY 11379  
I represent: JUNIPER PARK CIVIC ASSOC. (EXCLUSIVE) BOARD MEMBER  
Address: \_\_\_\_\_

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THE CITY OF NEW YORK**

Appearance Card

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I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: \_\_\_\_\_

(PLEASE PRINT)

Name: MANUEL CARUANA  
Address: 70-7 57 DR. MASPEETH 11378  
I represent: QCB5 + JUNIPER PARK CIVIC  
Address: \_\_\_\_\_

**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

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I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: MARCH 31<sup>ST</sup>, 09

(PLEASE PRINT)

Name: JAMES O'RAINE  
Address: 72-01 GRAND AVE. MASPEETH, N.Y. 11378  
I represent: MASPEETH CHAMBER OF COMMERCE  
Address: SAME

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THE CITY OF NEW YORK**

Appearance Card

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I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: 3.31.09

(PLEASE PRINT)

Name: CAROL ANASTASIAN

Address: 82-90 61 Drive

I represent: \_\_\_\_\_

Address: \_\_\_\_\_

**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

1031

I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: 3/31/09

(PLEASE PRINT)

Name: Matt Connolly

Address: 71-15 Grand Ave Maspeth NY

I represent: Maspeth Business Owners

Address: Same as above.

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THE CITY OF NEW YORK**

Appearance Card

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I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: \_\_\_\_\_

(PLEASE PRINT)

Name: John Kihlcommons

Address: 76-15 60 ROAD

I represent: Juniper Civic Assoc.

Address: Middle Village - NY

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THE CITY OF NEW YORK**

Appearance Card

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I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: March 31, 2009

(PLEASE PRINT)

Name: Rosemarie Dario

Address: 52-22 125<sup>th</sup> Street, Maspeth NY 11378

I represent: Comet Civic Assn

Address: PO Box 180151, Maspeth 11378

**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

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I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: \_\_\_\_\_

(PLEASE PRINT)

Name: Robert E. Ducey

Address: 25-06 65<sup>th</sup> Street NY 11379

I represent: Juniper Park Civic Assoc.

Address: \_\_\_\_\_

**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

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I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: \_\_\_\_\_

(PLEASE PRINT)

Name: Angelo Barberi

Address: 60-20 74<sup>th</sup> St

I represent: Juniper Park Civic

Address: \_\_\_\_\_

**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

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I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: 3/31/09

(PLEASE PRINT)

Name: Christina Wilkinson

Address: 69-07 58 Rd Maspeth NY 11378

I represent: Juniper Park Civic Assn

Address: P.O. Box 790275, Middle Village, NY 11379

**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

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I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: \_\_\_\_\_

(PLEASE PRINT)

Name: Korraine Sculli

Address: PO Box 275 Middle Village NY 11379

I represent: JPCA CBS

Address: PO Box 275 Middle Village NY 11379

**THE COUNCIL  
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: March 31 - 09

(PLEASE PRINT)

Name: Gregory P. Chaw

Address: 30-30 Thompson Ave LIC, NY

I represent: NYC School Construction Authority

Address: 30-30 Thompson Ave LIC NY 11101

Please complete this card and return to the Sergeant-at-Arms

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THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: \_\_\_\_\_

(PLEASE PRINT)

Name: Micah Lasher

Address: \_\_\_\_\_

I represent: Department of Education

Address: \_\_\_\_\_

Please complete this card and return to the **THE COUNCIL** Sergeant-at-Arms

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THE CITY OF NEW YORK**

Appearance Card

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in favor  in opposition

Date: 3/31/09

(PLEASE PRINT)

Name: Gregorio MATOS

Address: City Hall

I represent: MATOS' Office

Address: \_\_\_\_\_

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THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: MARCH 31, 2009

(PLEASE PRINT)

Name: KENRICK ON

Address: 3030 THOMSON AVE

I represent: NYC SCHOOL CONSTRUCTION AUTHORITY

Address: \_\_\_\_\_

Please complete this card and return to the Sergeant-at-Arms

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THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: \_\_\_\_\_

(PLEASE PRINT)

Name: Dieter Keppeler

Address: 60-72-76 Street Middle - Village

I represent: \_\_\_\_\_

Address: \_\_\_\_\_

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**THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: 3/31/09

(PLEASE PRINT)

Name: KATE DALY

Address: LANDMARKS COMMISSION

I represent: 1 CENTRE ST.

Address: \_\_\_\_\_

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**THE CITY OF NEW YORK**

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I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: \_\_\_\_\_

(PLEASE PRINT)

Name: ROSALIE GREER

Address: 72-22 57 AVE. MASSETH

I represent: LARRY FORGIONE

Address: 72-22 57 AVE.

Please complete this card and return to the Sergeant-at-Arms



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I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: 3/31/09

(PLEASE PRINT)

Name: ROBERT HOLDEN

Address: \_\_\_\_\_

I represent: JUNIPER PARK CIVIC ASSOC.

Address: PO BOX 790275 MIDDLEVILLE

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THE CITY OF NEW YORK**

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I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: 3/31/09

(PLEASE PRINT)

Name: Linda Daquardo

Address: 57-23 Mazeroll St Maspeth

I represent: \_\_\_\_\_

Address: \_\_\_\_\_

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THE CITY OF NEW YORK**

Appearance Card

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I intend to appear and speak on Int. No. \_\_\_\_\_ Res. No. \_\_\_\_\_

in favor  in opposition

Date: 3/31/09

(PLEASE PRINT)

Name: ANTHONY NUNZIATO

Address: 5604 Remond Place

I represent: MASPETH Chamber + Self

Address: MASPETH H164 School

Please complete this card and return to the **THE COUNCIL** Sergeant-at-Arms