

PHASE I ENVIRONMENTAL SITE ASSESSMENT

OF

**PROPOSED PRE-KINDERGARTEN / PUBLIC SCHOOL /
DEPARTMENT OF EDUCATION FACILITY
203-05 32ND AVENUE
QUEENS, NEW YORK 11361**

**SCA PROJECT ID NO. 098654
SCA CONTRACT NO. C000013008
SCA SERVICE ID NO. 61018**

CONSULTANT PROJECT NO. 232032.0000.0000

March 16, 2015

Prepared by:



TRC Engineers, Inc.
1430 Broadway 10th Floor
New York, New York 10018
Phone: (212) 221-7822
Fax: (212) 221-7840
Attn: Mr. Charles Guder

Prepared for:



NYCSCA
30-30 Thomson Avenue
Long Island City, NY 11101-3045
Phone: (718) 472-8502
Fax: (718) 472-8500
Attn: Ms. Lee Guterman

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY	1
2.0 INTRODUCTION	4
2.1 Selected Definitions	4
2.2 Purpose and Scope	5
2.3 Additions, Deviations, Deletions, Data Failures, and Data Gaps	6
2.4 Limitations and Exceptions	6
3.0 SITE DESCRIPTION	8
3.1 Site Location and Legal Description	8
3.2 Physical Setting	8
3.2.1 Topography	8
3.2.2 Geology	8
3.2.3 Soils	9
3.2.4 Hydrology	9
3.2.5 Radon	9
4.0 ADJOINING AND SURROUNDING PROPERTIES	10
5.0 HISTORICAL USE RESEARCH	12
5.1 Land Title Records and Tax Records	12
5.2 Historical USGS Topographic Quadrangles	12
5.3 Historical Aerial Photographs	13
5.4 Historical Fire Insurance Maps (Sanborn Maps)	14
5.5 City Directories	15
5.6 Prior Reports	16
5.7 Other Historical Sources	16
5.8 Historical Use Interviews	17
5.9 Historical Use Summary	17
6.0 REGULATORY AGENCY RECORD REVIEWS	17
6.1 Federal and State Regulatory Agency Database Reviews	18
6.2 Local Regulatory Agency Research	27
7.0 USER RESPONSIBILITIES	29
7.1 Environmental Liens or Activity and Use Limitations	29
7.2 Valuation Reduction for Environmental Issues	29
7.3 Specialized Knowledge or Experience of the User	29
7.4 Commonly Known or Reasonably Ascertainable Information	29
7.5 The Degree of Obviousness of the Presence or Likely Presence of Contamination At The Property	29
8.0 SITE RECONNAISSANCE AND INTERVIEWS	30
8.1 Methodology and Limiting Conditions	30
8.2 Site Reconnaissance	30
8.3 Current and Historical Use Interviews	31

PHASE I ENVIRONMENTAL SITE ASSESSMENT
PROPOSED PRE-KINDERGARTEN / PUBLIC SCHOOL / DOE FACILITY
203-05 32ND AVENUE
QUEENS, NEW YORK 11361

8.3.1	Current Property Owner.....	31
8.3.2	Current Site Operator or Key Site Manager	31
8.3.3	Site Occupants	31
8.3.4	Past Owners, Operators and Occupants	32
8.3.5	Report User.....	32
8.4	Hazardous Substances and Petroleum Products Storage and Handling	32
8.4.1	Hazardous Substances	32
8.4.2	Petroleum Products Storage and Handling.....	32
8.5	Solid Waste Generation, Storage and Disposal.....	32
8.6	Polychlorinated Biphenyls (PCBs).....	33
8.7	Asbestos-Containing Material (ACM)	33
8.8	Lead-Based Paint (LBP) Survey	33
8.9	Regulatory Compliance.....	33
8.10	Electromagnetic Fields	33
8.11	Other Environmental Conditions (Methane, mold, etc.)	34
9.0	SUMMARY OF FINDINGS.....	35
10.0	CONCLUSIONS AND RECOMMENDATIONS	36
11.0	SIGNATURES OF ENVIRONMENTAL PROFESSIONALS	38
12.0	REFERENCES	39
13.0	APPENDICES.....	40
	APPENDIX A - SITE LOCATION MAP	
	APPENDIX B - SITE PLAN	
	APPENDIX C - SITE PHOTOGRAPHS	
	APPENDIX D - NATIONAL WETLANDS INVENTORY MAP	
	APPENDIX E - FEMA FLOOD INSURANCE RATE MAP	
	APPENDIX F - HISTORICAL TOPOGRAPHIC MAPS	
	APPENDIX G - HISTORICAL AERIAL PHOTOGRAPHS	
	APPENDIX H - SANBORN FIRE INSURANCE MAPS	
	APPENDIX I - REGULATORY AGENCY DATABASE REPORT	
	APPENDIX J - CITY DIRECTORY ABSTRACT	
	APPENDIX K - PRIOR REPORTS/ SUPPORTING DOCUMENTATION	
	APPENDIX L - RECORDS OF COMMUNICATION & AGENCY CORRESPONDENCE	
	APPENDIX M - QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS	

1.0 EXECUTIVE SUMMARY

At the request of the Industrial and Environmental Hygiene (IEH) Division of the New York City School Construction Authority (NYCSCA), TRC Engineers, Inc. (TRC) conducted a Phase I Environmental Site Assessment (ESA) for the property located at 203-05 32nd Avenue, Queens, New York 11361 (the "Site"). The legal description of the Site is Block 6030, Lot 40. TRC understands that the NYCSCA is considering purchasing the Site for development of a Pre-Kindergarten, Public School, or Department of Education (DOE) facility.

The Site is 54,000 square feet (sf) in area and is improved by a paved parking area, a landscaped area, and a U-shaped building encompassing an approximately 25,000 sf footprint, which consists of two sections, an eastern section and a western section. The eastern section, which is occupied by the "Lowell School", is two-stories with a basement. The first and second stories consist of classroom units and the basement consists of offices, a library, tutoring rooms, bathrooms, a gymnasium/auditorium, a boiler room, an electrical room, an out-of-service kitchen, and a storage room. A portion of the western section is currently leased weekly to a dance group and is otherwise unoccupied. The remainder of the western section consists of offices, a chapel, a synagogue, a banquet room, and a kitchen with a partial second floor.

The Site is bordered to the north by residential buildings; to the east by 204th Street followed by Bayside High School athletic fields (athletic track, baseball fields, and tennis courts); to the south by 32nd Avenue followed by detached two-story single-family residences; and to the west by 203rd Street followed by two-family residences.

The Site was undeveloped prior to 1960, at which time the current Site building was constructed and occupied by Bayside Jewish Center. The eastern section of the Site building has been occupied by various educational institutions since construction. The western section of the building has been utilized as part of the Bayside Jewish Center from construction until recently.

The main objective of the Phase I ESA is to identify *recognized environmental conditions (RECs)* and environmental concerns that may affect the suitability of the Site for use as a Pre-Kindergarten, Public School, or DOE facility. RECs are defined in ASTM International (ASTM) Standard Practice E 1527-13 as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any *release* to the *environment*; (2) under conditions indicative of a *release* to the *environment*; or, (3) under conditions that pose a *material threat* of a future *release* to the *environment*. Note that *controlled recognized environmental conditions (CRECs)* are considered to be RECs and are listed in the Executive Summary and Conclusions of this Phase I ESA. Additionally, *vapor encroachment conditions (VECs)* were evaluated as per ASTM E 2600-10.

Other environmental issues and conditions that, in the opinion of the *environmental professional* conducting the assessment, would not be considered *RECs* are identified in this assessment. These may include *historical RECs*, and/or *de minimis* conditions. The Phase I ESA also includes a preliminary evaluation of specific potential environmental issues or conditions that are, according to ASTM E 1527-13, considered non-scope considerations. These issues include radon, asbestos-containing material (ACM), polychlorinated biphenyl- (PCB-) containing light ballasts and caulking materials, exterior lead-based paint (LBP), chemical storage, wetlands, regulatory compliance issues, dry cleaner and other industrial emissions, mold, biological agents, electromagnetic fields, and methane. The Phase I ESA included a review of federal, state, and local records, previous reports (if available) and historical documents; visual observation of the Site and adjoining properties; and interviews with selected Site representatives.

The assessment requested by the NYCSCA is intended to identify conditions that would have the potential to impact the value of the Site or the development and use of the Site as a Pre-Kindergarten, Public School, or DOE facility. The assessment was also conducted for purposes of environmental due diligence in order to qualify for the innocent landowner, a bona fide prospective purchaser or a contiguous property owner defense under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). The Phase I ESA included evaluation of the following: current and historical Site usage; current and historical usage of adjoining properties; regulatory agency records review; on-site solid waste management and disposal practices; on-site hazardous materials and petroleum products management; chemical storage, ACM, PCBs and exterior LBP management; wetlands; regulatory compliance issues; dry cleaner and other industrial emissions; radon; mold and moisture intrusion; biological agents; electromagnetic fields; and potential for methane generating materials.

Summary of RECs, CRECs, VECs and Environmental Concerns.

This Phase I ESA has revealed the following RECs and/or VECs in connection with the Site:

On-Site RECs/VECs:

- According to Site representatives, there was previously an underground fuel oil storage tank located in the landscaped area of the Site. Additionally, Site reconnaissance revealed decommissioned fuel lines within the basement boiler room. Potential historic releases from this fuel oil underground storage tank may have impacted the Site.
- Review of historic topographic maps and aerial photographs revealed that the Site was historically used as part of a golfing facility and for agricultural purposes. The potential historic use of pesticides and herbicides in connection with the past use of the Site as a golf course and for agricultural purposes is considered a REC.

Off-Site RECs/VECs:

- Review of the regulatory agency database report identified “[Sam’s] Bayside Cleaners” located approximately 0.14 miles upgradient of the Site at 200-03 32nd Avenue in the NY Drycleaners and Historic Cleaners databases; and in the RCRA CESQG, NY Manifests and FINDS databases for generation, transport and disposal of ignitable and halogenated solvent wastes.
- Review of the regulatory agency database report and Site reconnaissance revealed that a dry cleaner, “Maspeth Dry Cleaner”, is located in close proximity (less than one-quarter mile) and upgradient of the Site.
- Review of the regulatory agency database report identified “Porcelain Refinishing Corp.”, located approximately 0.2 miles upgradient of the Site, in the RCRA-SQG, FINDS, and NY Manifests databases for generation and disposal of ignitable waste and halogenated solvents. This facility was listed in the RCRA SQG database with several compliance violations.

Summary of Environmental Concerns

This Phase I ESA has revealed evidence of environmental concerns in connection with the Site, including the following:

- Based on the age of the Site building, suspect ACM may be present.
- Suspect LBP on interior and exterior surfaces was observed in the building during the Site inspection. Based on the age of the building, the painted surfaces may contain lead.
- Fluorescent light ballasts and exterior caulking were observed during the Site inspection. Since the Site building was constructed before 1978, PCB-containing materials and equipment may be present.
- Minor water damage in the ceiling was reported during Site interviews, however, was not observed during the Site reconnaissance. Evidence of water intrusion (i.e., stained concrete) was observed in the vicinity of a sump and floor drain in the basement storage room. There is a potential for mold growth associated with the reported water damage.

Recommendations

TRC recommends performing a Phase II Environmental Site Investigation to determine whether the identified REC/VEC has affected the suitability of the Site to be utilized as a Pre-Kindergarten, Public School, or Department of Education facility. In addition, TRC recommends performing a survey to identify ACM, LBP, and/or PCB-containing building materials which may be disturbed by demolition, renovation, or re-development of the Site. If identified, ACM, LBP and/or PCB-containing building materials should be properly managed during such activities. Additionally, mold and water damaged materials should be removed and replaced and the source(s) of the water infiltration should be eliminated.

2.0 INTRODUCTION

This report summarizes the results of the Phase I Environmental Site Assessment (ESA) of the proposed Pre-Kindergarten, Public School, or Department of Education (DOE) facility located at 203-05 32nd Avenue, Queens, New York 11361 (the “Site”). The legal description of the Site is Block 6030, Lot 40. TRC understands that the NYCSCA is considering purchasing the Site for development of a Pre-Kindergarten, Public School, or DOE facility.

The Site is 54,000 square feet (sf) in area and is improved by a paved parking area, a landscaped area, and a U-shaped building encompassing an approximately 25,000 sf footprint, which consists of two sections, an eastern section and a western section. The eastern section, which is occupied by the “Lowell School”, is two-stories with a basement. The first and second stories consist of classroom units and the basement consists of offices, a library, tutoring rooms, bathrooms, a gymnasium/auditorium, a boiler room, an electrical room, an out-of-service kitchen, and a storage room. A portion of the western section is currently leased weekly to a dance group and is otherwise unoccupied. The western section consists of offices, a chapel, a synagogue, a banquet room, and a kitchen with a partial second floor.

The Site is bordered to the north by residential buildings; to the east by 204th Street followed by Bayside High School athletic fields (athletic track, baseball fields, and tennis courts); to the south by 32nd Avenue followed by detached two-story single-family residences; and to the west by 203rd Street followed by two-family residences.

The Site reconnaissance was performed on February 18, 2015 by TRC representative Ms. Jenna Raup as well as members of the NYCSCA IEH Survey and Design, Architecture and Engineering, Construction Management, and Real Estate Divisions. TRC was escorted by Mr. Jamie Cueller, the facility custodian, representing the Site owner during the Site reconnaissance. The temperature during the Site visit was approximately 25 degrees Fahrenheit and the weather conditions were sunny. Snow cover was present on portions of the Site and a full inspection of the condition of exposed areas of the Site could not be performed. This is considered a limiting condition.

2.1 Selected Definitions

The following terms are used throughout this report and, for the purpose of clarity, corresponding definitions are provided. These terms are fully defined in ASTM E 1527-13 and ASTM E 2600-10.

Controlled recognized environmental condition (CREC) – A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority) with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

Historical recognized environmental condition (HREC) – A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

Recognized environmental condition (REC) – The presence or likely presence of any *hazardous substances* or *petroleum products* in, on, or at a *property*: (1) due to any *release* to the *environment*; (2) under conditions indicative of a *release* to the *environment*; or, (3) under conditions that pose a *material threat* of a future *release* to the *environment*.

Environmental Professional – A person meeting the education, training, and experience requirements as set forth in 40 CFR § 312.10(b), necessary to conduct a *site reconnaissance*, *interviews*, and other activities in accordance with this practice, and from the information generated by such activities, having the ability to develop opinions and conclusions regarding conditions indicative of releases or threatened releases on, at, in, or to a property, sufficient to meet the objectives and performance factors in 40 CFR § 312.20(e) and (f).

Vapor Encroachment Condition (VEC) – The presence or likely presence of chemical of concern vapors in the subsurface of the target property caused by the release of vapors from contaminated soil or groundwater or both either on or near the target property.

2.2 Purpose and Scope

The purpose of this assessment is to identify *RECs*, *CRECs*, *VECs*, and certain other environmental issues or concerns as they existed at the Site at the time of the Site visit. The assessment is intended to identify conditions that would have the potential to impact the value of the Site or the development and use of the Site as a Pre-Kindergarten, Public School, or DOE facility. The assessment was also conducted for purposes of environmental due diligence in order to qualify for the innocent landowner, a bona fide prospective purchaser or a contiguous property owner defense under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). The Phase I ESA included, but was not limited to an assessment of the following potential environmental issues: current and historical Site usage; current and historical usage of adjoining properties; regulatory agency records review; on-Site solid waste management and disposal practices; on-Site hazardous materials and petroleum products management; asbestos-containing material (ACM), polychlorinated biphenyl- (PCB-) containing equipment and lead-based paint (LBP) management; wetlands; regulatory compliance issues; dry cleaner and other industrial emissions, radon, mold and moisture intrusion; biological agents; electromagnetic fields; and, potential for methane generating materials.

This evaluation was conducted by qualified *environmental professionals* utilizing a standard of good commercial and customary practice in accordance with the ASTM E 1527-13. The scope of work completed for this evaluation meets all requirements of ASTM 1527-13 and includes the following:

- Documenting the physical characteristics of the Site through a review of available topographic, geologic, wetland, flood plain, groundwater data and Site observations.
- Researching the Site history through a review of reasonably ascertainable standard sources such as land deeds, fire insurance maps, city directories, aerial photographs, prior reports and interviews.
- Documenting current Site conditions, via observations and interviews, regarding the presence or absence of hazardous substances/petroleum products; the generation, treatment, storage, or disposal of hazardous, regulated, or medical wastes; the presence of electrical equipment that utilizes oils which

potentially contain PCBs; and the presence of storage tanks (above and below ground), floor drains, drains that discharge to subsurface, former septic tanks and drywells.

- Determining the usage of adjoining and nearby properties to identify the likelihood for environmental conditions (if present and/or suspected) and concerns to migrate onto the Site.
- Evaluating information contained within federal and state environmental databases and other local environmental records, within specific search distances.

2.3 Additions, Deviations, Deletions, Data Failures, and Data Gaps

The following environmental issues that are outside the scope of (additions to) ASTM E 1527-13 were evaluated:

- A review of available radon data for the Site vicinity.
- A review of available wetlands data.
- A visual assessment for water damage and mold.
- A visual assessment for suspect ACM.
- A visual assessment for suspect LBP.
- An assessment of potential methane generation on-Site or migration to the Site.
- Regulatory compliance.
- PCB light ballasts and caulking materials.
- Biological agents (mold, pigeon guano, medical waste, etc.).
- Air emissions from dry cleaners and other industrial sources.
- An assessment of the potential presence of electromagnetic fields (EMF).
- An assessment of any dust generating activities on or near the Site.

The following deviations, data gaps and deletions from ASTM E 1527-13 were necessary in conducting this assessment:

1. The Site area history was not conducted in five-year intervals. However, sufficient information about the history of the Site and surrounding area could be obtained from the available historical fire insurance maps, aerial photographs, city directories, and local records, and this data gap is not likely to alter the conclusions of this report.
2. Snow cover was present on portions of the Site and a full inspection of the condition of exposed areas of the Site could not be performed. This is considered a data gap and limiting condition.

2.4 Limitations and Exceptions

TRC has prepared this Phase I ESA using reasonable efforts in each phase of its work to identify RECs associated with hazardous substances, wastes and petroleum products at the Site. The methodology of the Phase I ESA was consistent with the ASTM E 1527-13. Findings within this report are based on information collected from observations made on the day of the Site investigation and from reasonably ascertainable information obtained from governing public agencies and private sources.

**PHASE I ENVIRONMENTAL SITE ASSESSMENT
PROPOSED PRE-KINDERGARTEN / PUBLIC SCHOOL / DOE FACILITY
203-05 32ND AVENUE
QUEENS, NEW YORK 11361**

This report is not definitive and should not be assumed to be a complete or specific definition of the conditions above or below grade. Information in this report is not intended to be used as a construction document and should not be used for demolition, renovation, or other construction purposes. TRC makes no representation or warranty that the past or current operations at the Site are or have been in compliance with all applicable federal, state and local laws, regulations and codes.

Regardless of the findings stated in this report, TRC is not responsible for consequences or conditions arising from facts that were concealed, withheld, or not fully disclosed at the time the evaluation was conducted.

This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated.

The regulatory database report provided is based on an evaluation of the data collected and compiled by a contracted data research company. The report focuses on the Site and neighboring properties that could impact the Site. Neighboring properties listed in governmental environmental records are identified within specific search distances. The search distance varies depending upon the particular government record being checked. The regulatory research is designed to meet the requirements of ASTM E 1527-13. The information provided in the regulatory database report is assumed to be correct and complete.

3.0 SITE DESCRIPTION

3.1 Site Location and Legal Description

The Site is located at 203-05 32nd Avenue, Queens, New York 11361. The legal description for the Site is Block 6030, Lot 40. The New York City Department of City Planning (NYCDCP) Zoning Map 10c indicates that the Site is designated as zone R3X, which is a low density residential district consisting of one- and two-family detached homes.

An “E”-Designation is a zoning designation that provides notice of the presence of an environmental requirement pertaining to potential hazardous materials contamination or noise or air quality impacts on a particular tax lot. “E”-designations are established as part of a change in zoning that would allow additional development to occur on the property, or would permit uses not currently allowed. Based on a review of the City Environmental Quality Review (CEQR) Environmental Designations, the Site does not have an “E”-Designation.

A map showing the location of the Site is presented in *Appendix A*. A Site plan showing the physical layout including adjacent land use is presented in *Appendix B*. Photographs of Site and surrounding areas are included in *Appendix C*. A zoning map is included in *Appendix K*.

The Site is 54,000 sf in area and is improved by a paved parking area, a landscaped area, and a U-shaped building encompassing an approximately 25,000 sf footprint, which consists of two sections, an eastern section and a western section. The eastern section, which is occupied by the “Lowell School”, is two-stories with a basement. The first and second stories consist of classroom units and the basement consists of offices, a library, tutoring rooms, bathrooms, a gymnasium/auditorium, a boiler room, an electrical room, an out-of-service kitchen, and a storage room. A portion of the western section is currently leased weekly to a dance group and is otherwise unoccupied. The remainder of the western section consists of offices, a chapel, a synagogue, a banquet room, and a kitchen with a partial second floor.

Based on the review of historic Sanborn Fire Insurance Maps (Sanborn Maps), the Site has not experienced significant changes since the most recent Sanborn Fire Insurance Map, dated 2006.

3.2 Physical Setting

3.2.1 Topography

The topography of the surrounding area slopes to the south. According to the United States Geological Survey (USGS) 7.5-Minute Quadrangle Map, Flushing, NY 1995) and information contained in the regulatory agency database report, the Site elevation is approximately 100 feet above mean sea level (amsl). A copy of the topographic map is presented in *Appendix A*.

3.2.2 Geology

The geology of Queens County consists of unconsolidated glacial deposits overlying crystalline bedrock. Based on available literature (Buxton, Soren, Posner, and Shernoff, 1981), the subsurface geology of the Site likely includes the following formations: Pleistocene upper glacial deposits, Gardiners Clay, Jameco Gravel, Cretaceous Raritan Formation consisting of sands and clays, and crystalline bedrock. The depth to crystalline bedrock for the area is estimated to be approximately 400 feet below ground surface (bgs).

3.2.3 Soils

According to the U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) STATSGO data summarized in the regulatory agency database report, soil in the area of the Site is described as Urban Land. Urban Land refers to soils that have been altered by human activities thus making them unidentifiable. Typically, these soils have been mixed with other materials, such as brick and concrete (urban fill), and characteristics can only be determined by on-site investigation.

3.2.4 Hydrology

Little Neck Bay is located approximately 1 mile to the east of the Site. The Site is generally flat. Based on the review of the USGS Hydraulic Conditions Map for Long Island, NY 2006 (*Long Island Depth to Water Viewer and Groundwater Conditions on Long Island New York in 2006*), the groundwater flow in the area of the Site is assumed to be to the east towards Little Neck Bay. The online *Long Island Depth to Water Viewer* indicated that the depth to groundwater is approximately 75 feet bgs.

The current United States Fish and Wildlife National Wetlands Index map for the area of the Site was reviewed to determine if the Site is located in a regulated wetlands area. Based on a review of the map and observations made during the Site reconnaissance, the Site is not located within a regulated wetland area. A copy of the wetlands map is included in *Appendix D*.

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for the Site area (Community Panel Number 3604970118F) was reviewed on-line to assess whether the Site is located within a designated flood plain or flood zone. The Panel Map for the Site is not available for printing and the FEMA website indicates that there is no information for the Site area; however, a schematic of the Site area from the FEMA website is included in *Appendix E*.

3.2.5 Radon

Radon is a colorless, odorless radioactive gas that results from the natural breakdown of uranium minerals in soil, rock, and water, which subsequently enters the atmosphere. It can concentrate in buildings, entering through cracks and other penetrations of a building foundation. Some areas are more likely to have elevated concentrations of radon than others, reflecting subsurface lithologic conditions.

There is no data provided in the regulatory agency database for radon test results in zip code 11361 which encompasses the Site. According to data provided in the New York Radon database presented in the regulatory agency database report (*Appendix I*), radon concentrations were tested at 81 locations in Queens County. The average radon concentration in Queens County, New York was 0.620 picoCuries per liter (pCi/L) in living areas tested and 0.970 pCi/L in basements tested. The New York State Department of Health (NYSDOH) maintains a database of radon test results on a local and county level (*Appendix K*). According to the NYSDOH, 527 radon tests have been conducted in Queens County. The average radon level was found to be 1.24 pCi/L in the basements tested. These results are below the United States Environmental Protection Agency (USEPA) Action Level of 4.0 pCi/L; therefore, radon is not considered an environmental concern at the Site.

4.0 ADJOINING AND SURROUNDING PROPERTIES

The general area of the Site consists of residential land use. The following table summarizes the adjoining property uses:

Direction	Facility Name/Description	Street Address/Location	Current Use
North	<ul style="list-style-type: none"> • Residential buildings • Lederman Caterers 	<ul style="list-style-type: none"> • 29-15 203rd Street • 29-14 204th Street 	<ul style="list-style-type: none"> • Residential • Private Catering Company (formerly part of the Bayside Jewish Center facility)
East	<ul style="list-style-type: none"> • 204th Street • Bayside Fields 	<ul style="list-style-type: none"> • N/A • N/A 	<ul style="list-style-type: none"> • Public Street • Bayside High School Athletic Fields
South	<ul style="list-style-type: none"> • 32nd Avenue • Residential buildings 	<ul style="list-style-type: none"> • N/A • 203-18 32nd Ave • 203-14 32nd Ave • 203-08 32nd Ave • 203-04 32nd Ave 	<ul style="list-style-type: none"> • Public Street • Residential
West	<ul style="list-style-type: none"> • 203rd Street • Residential 	<ul style="list-style-type: none"> • N/A • 202-19 32nd Ave • 29-32 203rd St • 29-28 203rd St • 29-24 203rd St 	<ul style="list-style-type: none"> • Public Street • Residential

The Site is located in a highly developed urban area of Queens consisting primarily of residential structures. No adjoining properties are listed in the regulatory agency databases.

The Site is bordered to the north by residential buildings; to the east by 204th Street followed by Bayside High School athletic fields (athletic track, baseball fields, and tennis courts); to the south by 32nd Avenue followed by detached two-story single-family residences; and to the west by 203rd Street followed by two-family residences.

Based on the review of the historic Sanborn Maps, the adjoining properties have not experienced significant changes since the most recent Sanborn Fire Insurance Map, dated 2006. A dry cleaning facility, “Maspeth Dry Cleaners”, was observed during Site reconnaissance located at 200-19 32nd Avenue. “Maspeth Dry Cleaners” is listed in the Historic Cleaners database as a dry cleaning facility from 2008 to 2012. Based on its close proximity to the Site and historic use as a dry cleaning facility, this facility is considered a REC.

TRC conducted a review of the surrounding properties to determine if any existing public schools were located within a two block radius of the Site. P.S. 159 is located one block southeast of the Site.

**PHASE I ENVIRONMENTAL SITE ASSESSMENT
PROPOSED PRE-KINDERGARTEN / PUBLIC SCHOOL / DOE FACILITY
203-05 32ND AVENUE
QUEENS, NEW YORK 11361**

Refer to applicable portions of Sections 5.0 and 6.0 for descriptions of the historical uses of the surrounding areas and for the results of review of regulatory agency databases.

5.0 HISTORICAL USE RESEARCH

5.1 Land Title Records and Tax Records

TRC reviewed prior ownership information for the Site provided by the New York City Department of Finance Office of the City Registrar. Public deed records and tax records were searched for Block 6030, Lot 40 (203-05 32nd Avenue), Queens, New York 11361. The search yielded no records for review. The lien search performed for the Site indicated that the current owner is the Bayside Jewish Center which was deeded the property in 1958 from the City of New York. Supporting documentation including documentation of the search is presented in *Appendix K*.

5.2 Historical USGS Topographic Quadrangles

TRC reviewed available historical USGS topographic quadrangles provided by Environmental Data Resources, Inc. of Milford, Connecticut (EDR) for information regarding past uses of the Site and surrounding properties. The following table presents descriptions and interpretations from review of historical USGS topographic quadrangles.

Year	Comments
1897 Harlem, 1:62,500 scale	Site: The Site appears to be undeveloped. Surrounding Properties: The surrounding properties are primarily undeveloped. "Whitestone" is shown north of the Site followed by "Little Bay"; "Little Neck Bay" is located east of the Site; the "Long Island Railroad" (LIRR) is located south of the Site; and "Flushing Bay" is located west of the Site.
1947 Flushing, 1:25,000 scale	Site: The Site appears to be undeveloped and approximately 100 feet amsl. Surrounding Properties: Surrounding properties to the east, west, and south are shown as developed. "Fort Totten US Government Reservation" is shown north of the Site; "Cross-Island Parkway" is shown north and east of the Site; "Bayside Yacht Club" and "Crocheran Park" are shown east of the Site; "Flushing Cemetery" is shown southwest of the Site, and "Francis Lewis Blvd." is shown west of the Site followed by "Bowne Park". No other significant changes from the previous topographic map are noted.
1955 Flushing, 1:24,000 scale	Site: The Site appears to be part of the "Bayside Golf Course". Surrounding Properties: "Clearview Park Golf Course" is shown northeast of the Site. A building labeled "High Sch" is shown east of the Site followed by "St. Mary's Hospital for Children"; "PS 159" is shown south of the Site followed by "Our Lady of the Most Blessed Sacrament Sch" and the LIRR "Bayside Sta"; "PS 32" is shown southwest of the Site followed by "St Andrew Avelino Sch"; "Holy Cross High Sch" is shown west of the Site; and "Flushing Manor Sch" is shown northwest of the Site followed by "PS 209". No other significant changes from the previous topographic map are noted.
1966 Flushing, 1:24,000 scale	Site: The Site appears developed and the "Bayside Golf Course" is no longer shown. No other significant changes from the previous topographic map are noted. Surrounding Properties: The area of the "Bayside Golf Course" is developed with roads and an athletic track. "Clearview Park Golf Course" is now depicted only as "Golf Course". "PS 169 is located northwest of the Site". "Clearview Expressway" is shown east of the Site followed by "Golden Park"; "Bayside Yacht Club" is no longer shown east of the Site. "Raymond O'Connor Park" is shown southeast of the Site followed by PS 41; "Our Lady of the Most Blessed Sacrament Sch" is no longer shown south of the Site. "Holy Cross High Sch" is shown west of the Site. No other significant changes from the previous topographic map are noted.

PHASE I ENVIRONMENTAL SITE ASSESSMENT
 PROPOSED PRE-KINDERGARTEN / PUBLIC SCHOOL / DOE FACILITY
 203-05 32ND AVENUE
 QUEENS, NEW YORK 11361

Year	Comments
1979, 1995 Flushing, 1:24,000 scale	Site: No significant changes from the previous topographic map are noted. Surrounding Properties: No significant changes from the previous topographic map are noted.

The review of the historical USGS topographic quadrangles revealed the presence of RECs, CRECs, or VECs at the Site and surrounding areas:

- Topographic maps revealed that the Site was historically used as a golf course. The potential historic use of pesticides and herbicides in connection with the use of the Site as a golf course is considered a REC.

Copies of the historical USGS topographic quadrangles are included in *Appendix F*.

5.3 Historical Aerial Photographs

TRC reviewed aerial photographs of the Site and surrounding areas provided by EDR in order to identify historical land uses that may have involved hazardous substances and petroleum products. The dates of the photographs reviewed ranged from 1924 to 2011. The following table summarizes descriptions and interpretations from the aerial photography reviews:

Year	Comments
1924 1" = 500'	Site: The Site is undeveloped and appears to be used for agricultural purposes. Surrounding Properties: Surrounding areas appear to be either undeveloped or farmland. A road is present south of the Site and west of the Site.
1951 1" = 500'	Site: The Site is undeveloped and appears to be part of a golf course. No other significant changes from the previous aerial photograph are noted. Surrounding Properties: Properties located north and east of the Site appear to be developed as part of a golf course. Surrounding properties consist primarily of low-rise residential buildings and a few mid-rise buildings. No other significant changes from the previous aerial photograph are noted.
1954 1" = 500'	Site: No significant changes from the previous aerial photograph are noted. Surrounding Properties: No significant changes from the previous aerial photograph are noted.
1961 1" = 500'	Site: The Site is developed with the current Site building. No other significant changes from the previous aerial photograph are noted. Surrounding Properties: Previously undeveloped properties north and east of the Site (former golf course) appear developed with low-rise residential buildings with the exception of the north adjoining property. The east adjoining property is improved with an athletic track and a baseball diamond. There is a highway present east of the Site. No other significant changes from the previous aerial photograph are noted.
1966, 1975 1" = 500'	Site: No significant changes from the previous aerial photograph are noted. Surrounding Properties: No significant changes from the previous aerial photograph are noted.
1984 1" = 500'	Site: No significant changes from the previous aerial photograph are noted. Surrounding Properties: The northern adjoining properties are developed with residential buildings. No other significant changes from the previous aerial photograph are noted.

PHASE I ENVIRONMENTAL SITE ASSESSMENT
 PROPOSED PRE-KINDERGARTEN / PUBLIC SCHOOL / DOE FACILITY
 203-05 32ND AVENUE
 QUEENS, NEW YORK 11361

Year	Comments
1994 1" = 500'	Site: The northern portion of the Site appears to be used for vehicle parking. No other significant changes from the previous aerial photograph are noted. Surrounding Properties: No significant changes from the previous aerial photograph are noted.
2006, 2009, 2011 1" = 500'	Site: No significant changes from the previous aerial photograph are noted. Surrounding Properties: No significant changes from the previous aerial photograph are noted.

The review of the historical aerial photographs revealed the presence of the following RECs, CRECs, or VECs at the Site and surrounding areas:

- Aerial photographs revealed that the Site was historically used for agricultural purposes. The potential historic use of pesticides and herbicides in connection with the use of the Site for agricultural purposes is considered a REC.

Copies of reproducible aerial photographs are included in *Appendix G*.

5.4 Historical Fire Insurance Maps (Sanborn Maps)

A search for historical fire insurance maps for the Site and adjoining properties was conducted by EDR. The following table presents descriptions and interpretations from historical fire insurance map review. Descriptions presented in bold font are considered RECs/VECs.

Year	Comments
1903, 1917	Site: The Site is undeveloped. Surrounding Properties: The Sanborn Map is of poor quality. Surrounding property uses are not discernible, although the western adjoining property is labeled "Patrick Shanahan".
1934	Site: The Site is undeveloped. The Site is labeled "Bayside Golf Course"; however, the street grids are present and the adjoining streets east, west, and north of the Site are labeled "not open". Surrounding Properties: "32 nd Ave" is shown south of the Site. Adjoining properties to the north, south, east, and west and surrounding properties to the north and east are primarily undeveloped. Surrounding properties to the west and south primarily consist of low-rise residential buildings with automobile garages. No other significant changes from previous Sanborn Map are noted.
1951	Site: No significant changes from the previous Sanborn Map are noted. Surrounding Properties: Adjoining properties to the west and south are further developed with low-rise residential buildings. No other significant changes from the previous Sanborn Map are noted.
1980	Site: The Site is labeled "Bayside Jewish Center" and is developed with a one to two-story U-shaped building with a partial basement. The construction date depicted on the Sanborn map is 1960. The northern portion of the Site is labeled "Park'g". Surrounding Properties: The east adjoining property to the Site is labeled "Playground" and "Bayside High School Field Ho" and surrounding properties to the north are developed with low-rise residential buildings. No other significant changes from the previous Sanborn Map are noted.

PHASE I ENVIRONMENTAL SITE ASSESSMENT
 PROPOSED PRE-KINDERGARTEN / PUBLIC SCHOOL / DOE FACILITY
 203-05 32ND AVENUE
 QUEENS, NEW YORK 11361

Year	Comments
1982	Site: The northern portion of the Site block is developed with residential buildings. No other significant changes from the previous Sanborn Map are noted. Surrounding Properties: No significant changes from the previous Sanborn Map are noted.
1985, 1988, 1991, 1992, 1993, 1994, 1995, 1999, 2001, 2002, 2003, 2005, and 2006	Site: No significant changes from the previous Sanborn Map are noted. Surrounding Properties: No significant changes from the previous Sanborn Map are noted.

The review of historical fire insurance maps (Sanborn maps) revealed no RECs, CRECs, or VECs at the Site. Copies of the historic Sanborn Fire Insurance Maps are included in *Appendix H*.

5.5 City Directories

A review of historic city directories was conducted by EDR. Descriptions presented in bold font are considered RECs. The following table presents descriptions and interpretations from the historical city directory reviews.

Year	Comments
1922	Site: Address not listed Surrounding Properties: Address not listed
1934	Site: Address not listed Surrounding Properties: Address not listed
1939	Site: Address not listed Surrounding Properties: Address not listed
1945	Site: Address not listed Surrounding Properties: Residential listings on 32 nd Avenue
1950	Site: Address not listed Surrounding Properties: Address not listed
1962	Site: "Bayside Jewish Cntr", "Charner Theo Rabbi", "Hebrew Academy of North Queens", "Orentlicher Wm A Rabbi" Surrounding Properties: Residential listings on 32 nd Avenue
1967	Site: "Bayside Jewish Cntr", "Bklys Caterers Assn Inc", "Catrers", "Charner Theo Rabbi", "Orentlicher Wm A Rabbi", "Wells Armeta", "Morowitz Norman Rabbi", "Hebrew Academy of North Queens" Surrounding Properties: Residential listings on 203 rd Street
1970	Site: "Bayside Jewish Cntr", "Charner Theo Rabbi", "Hebrew Academy of North Queens", "Morowitz Norman Rabbi", "Nights Sun & Holiday's", "Orentlicher Wm A Rabbi" Surrounding Properties: Residential listings on 203 rd Street

PHASE I ENVIRONMENTAL SITE ASSESSMENT
 PROPOSED PRE-KINDERGARTEN / PUBLIC SCHOOL / DOE FACILITY
 203-05 32ND AVENUE
 QUEENS, NEW YORK 11361

Year	Comments
1976	Site: “Banquet Office”, “Bayside Jewish Center ofc”, “Bayside Jewish Cntr”, “Charner Theo Rabbi”, “Hebrew Academy of North Queens”, “Heller Hebrew Academy”, “Nights Sun & Holidys” Surrounding Properties: Residential listings on 203 rd Street and 32 nd Avenue
1983	Site: “Caterers”, “Learning Inst In Queens”, “Lederman Caterers Ltd”, “Lowell School The”, “Office” Surrounding Properties: Residential listings on 203 rd Street and 32 nd Avenue
1991	Site: “Bayside Jewish Center Caterers”, “Learning Inst In Queens”, “Lederman Caterers”, “Lederman Caterers Ltd”, “Lowell School The”, “Office”, “Orentlicher Wm A Rabbi” Surrounding Properties: Residential listings on 203 rd Street and 32 nd Avenue
1996	Site: Address not listed. Surrounding Properties:
2000	Site: “Bayside Jow Ctr”, “Lederman Ctrrs Ltd”, “Lrnsg Inst In Ons”, “Rabi W Orentlicher”, “The Lowell School” Surrounding Properties: Residential listings on 203 rd Street and 32 nd Avenue
2005	Site: “Bayside Jewish Ctr”, “h Orentlicher William A Rabb”, “Ledennrman Caterers LTD”, “Lowell School”, “Magic Carpet Day Camp” Surrounding Properties: Residential listings on 203 rd Street and 32 nd Avenue
2008	Site: Address not listed. Surrounding Properties: Address not listed
2013	Site: Address not listed. Surrounding Properties: Address not listed

As a result of the review of Historic City Directories, no RECs/VECs were identified. Copies of the historic City Directory Abstracts are included in *Appendix J*.

5.6 Prior Reports

There were no prior reports available for review.

5.7 Other Historical Sources

The Property Shark™ report was obtained and reviewed as part of this assessment for the Site. The Property Shark™ report indicated that the Site building is a “Church”, “Synagogue”, “Chapel”. The Property Shark™ report did not identify a “toxic site” on the Site or on the neighboring properties. The Property Shark™ report is provided in *Appendix K*.

Additionally, TRC reviewed the information available online in the New York City Office of Environmental Remediation’s Searchable Property Environmental E-Database (“SPEED”) for the Site. Neither the Site nor any other property in close proximity to the Site are identified in databases listed on the SPEED map. A copy of the Searchable Property Environmental E-Database map is presented in *Appendix K*.

There were no other historical reports reviewed in preparing this report.

5.8 Historical Use Interviews

The Site representative indicated that the facility has been occupied as a school and synagogue since the building was constructed in 1960 which is confirmed by the certificates of occupancy (C of O) obtained for the Site. The C of O's are provided in *Appendix K*. There was no additional information provided regarding the historic use during the Site reconnaissance.

5.9 Historical Use Summary

The following table summarizes the findings of the research pertaining to historical Site use:

YEARS	HISTORICAL USES		SOURCE(S)	COMMENTS
	Site	Surrounding Properties		
1897-1934	The Site is undeveloped	Residential development to the west and south; undeveloped to the north and east.	Historic Sanborn Maps, Topographic Maps, Aerial Photographs, City Directories	None.
1934-1960	The Site is part of the "Bayside Golf Course"	The north and east adjoining properties are part of the "Bayside Golf Course". Other surrounding properties are residential.	Historic Sanborn Maps, Topographic Maps, Aerial Photographs	None.
1960-Present	The Site is developed with a U-shaped building occupied by a synagogue and a school and designated "Bayside Jewish Center"	An athletic track is located east of the Site and other surrounding properties are residential.	Historic Sanborn Maps, Topographic Maps, Aerial Photographs, City Directory Abstract	None.

There were no RECs, CRECs, HRECs, or VECs identified from the review of the historic records for the Site.

6.0 REGULATORY AGENCY RECORD REVIEWS

The databases discussed in this section, provided by EDR, were reviewed for information regarding documented and/or suspected releases of regulated hazardous substances and/or petroleum products on or near the Site. TRC also reviewed the “unmappable” (also referred to as “orphan”) listings within the database report, cross-referencing available address information and facility names. Unmappable sites are listings that cannot be plotted with confidence, but are identified as being located within the general area of the Site based on the partial street address, city name, or zip code. In general, a listing cannot be mapped due to inaccurate or incomplete address information in the database that was supplied by the corresponding regulatory agency. Any listings from the unmappable summary which were identified by TRC as a result of the area reconnaissance and/or cross-referencing to mapped listings are included in the corresponding database discussion within this section.

6.1 Federal and State Regulatory Agency Database Reviews

A review of federal and state records for the Site was accomplished by contacting offices of federal and state regulatory agencies and review of the regulatory listings compiled in the regulatory agency database report (*Appendix I*). The results of the review of the federal and state records are presented below. Copies of the correspondences are included in *Appendix L*.

United States Environmental Protection Agency (USEPA)

A Freedom of Information Law (FOIL) request dated February 17, 2015 was filed with the USEPA to determine if the agency holds additional records pertaining to the Site. TRC has not yet received a response from the USEPA. Upon receipt of this information, TRC will review the response and, if conclusions contained within this report are affected, TRC will submit an addendum to the NYCSCA.

New York State Department of Environmental Conservation (NYSDEC)

A FOIL request dated February 17, 2015 was filed with the NYSDEC to determine if the agency holds additional records pertaining to the Site. TRC has not yet received a response from the NYSDEC. Upon receipt of this information, TRC will review the response and, if conclusions contained within this report are affected, TRC will submit an addendum to the NYCSCA.

New York State Department of Health (NYSDOH)

A FOIL request dated February 17, 2015 was filed with the NYSDOH to determine if the agency holds records pertaining to the Site. TRC has not yet received a response from the NYSDOH. Upon receipt of this information, TRC will review the response and, if conclusions contained within this report are affected, TRC will submit an addendum to the NYCSCA.

A summary of sites identified through the Federal and State regulatory agency databases review is provided in the following table:

PHASE I ENVIRONMENTAL SITE ASSESSMENT
 PROPOSED PRE-KINDERGARTEN / PUBLIC SCHOOL / DOE FACILITY
 203-05 32ND AVENUE
 QUEENS, NEW YORK 11361

Federal and State List	Last Updated	Search Radius*	No. of Sites within Search Radius	Site Appears on List	RECs, CRECs, or VECs Identified
National Priorities List for Federal Superfund Cleanup (NPL)	12/16/2014	1 mile	0	No	No
Delisted NPL Site List	12/16/2014	1 mile	0	No	No
Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), including CERCLIS-NFRAP Sites	10/25/2013	½ mile	0	No	No
Resource Conservation and Recovery Information System – Corrective Action Activity RCRIS CORRACTS and Non-CORRACTS Treatment, Storage, or Disposal Facilities (RCRIS-TSD),	12/09/2014	1 mile / ½ mile	0/0	No	No
Resource Conservation and Recovery Information System Generators/Transporters (RCRIS Gen/Trans)	12/09/2014	¼ mile	3**	No	No
Federal Institutional Control/Engineering Control Registries	09/18/2014	½ mile	0/0	No	No
Emergency Response Notification System (ERNS)	09/24/2014	Site	NA ¹	No	No
Toxic Release Inventory System (TRIS)	12/31/2011	¼ mile	0	No	No
New York State Inactive Hazardous Waste Disposal Site (SHWS)	11/18/2014	1 mile	0	No	No
New York State Deleted Inactive Hazardous Waste Disposal Sites	11/18/2014	1 mile	0	No	No
Hazardous Substance Waste Disposal Site Inventory (HSWDS)	01/01/2003	½ mile	0	No	No
Solid Waste Management Facilities Sites (SWMF)	01/06/2015	½ mile	0	No	No
Vapor Reopened	11/01/2014	1 mile	0	No	No
New York State Spills Information (NY Spills)/Leaking Underground Storage Tanks (LTANKS)	01/20/2015	½ mile	78/13	No	No
Petroleum Bulk Storage Tanks (USTs/ASTs)	12/29/2014	¼ mile	0/1	No	No
State Voluntary and Brownfield Cleanup Program Sites	11/18/2014	1 mile	0	No	No
Registered Dry Cleaners	12/03/2014	½ mile	6	No	No

PHASE I ENVIRONMENTAL SITE ASSESSMENT
 PROPOSED PRE-KINDERGARTEN / PUBLIC SCHOOL / DOE FACILITY
 203-05 32ND AVENUE
 QUEENS, NEW YORK 11361

Federal and State List	Last Updated	Search Radius*	No. of Sites within Search Radius	Site Appears on List	RECs, CRECs, or VECs Identified
Manufactured Gas Plant Sites (Coal Gas)	NA ¹	1 mile	0	No	No
E Designation Sites	03/12/2014	¼ mile	0	No	No
NY Manifest	11/01/2014	¼ mile	5	No	No
EDR US Historic Auto Stations	NA ¹	¼ mile	3	No	No
EDR US Historic Cleaners	NA ¹	¼ mile	17	No	No

* The surrounding area search radius indicates the radial area (measured from perimeter of the Site) for which the databases review was performed.

** The database search identified two (2) RCRA small quantity generators (SQGs) and one (1) conditionally exempt small quantity generator (CESQGs) within a one-quarter-mile radius of the Site.

¹NA – Not Applicable

As the summary table indicates, the Site is not listed in any databases.

The following subsections provide a discussion of the listings for the Site and surrounding properties, which have been identified within the search radius and listed in the table:

National Priorities Listing (NPL) – Environmental Protection Agency Superfund

The NPL is a subset of the CERCLIS and lists properties that are ranked as high priority for cleanup under the Superfund program.

Neither the Site nor any other facilities within a one-mile radius of the Site are listed in the NPL database.

Delisted NPL Site List

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the USEPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL when no further response is appropriate.

Neither the Site nor any other facilities within a one-mile radius of the Site are listed in the delisted NPL database.

Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS)

The CERCLIS list is a compilation of known and suspected uncontrolled or abandoned hazardous waste sites which are, or were, under investigation by USEPA but have not been elevated to the status of a Superfund (NPL) site. Former CERCLIS sites that have been granted the status of No Further Remedial Action Planned (NFRAP) are also included in this database.

Neither the Site nor any other facilities within a one-half-mile radius of the Site are listed in the CERCLIS database.

PHASE I ENVIRONMENTAL SITE ASSESSMENT
 PROPOSED PRE-KINDERGARTEN / PUBLIC SCHOOL / DOE FACILITY
 203-05 32ND AVENUE
 QUEENS, NEW YORK 11361

Resource Conservation and Recovery Information System - Treatment, Storage, or Disposal Facilities (RCRIS-TSD)/RCRIS Corrective Action Activity (CORRACTS)

The RCRA program identifies and tracks hazardous wastes from the point of generation to the point of disposal. The RCRIS database tracks those facilities that treat, store and/or dispose of hazardous materials as defined by RCRA (referred to as TSD facilities). The RCRIS CORRACTS database identifies TSD facilities that have conducted, or are currently conducting, corrective action(s) as regulated under RCRA.

Neither the Site nor any other facilities within a one-mile radius of the Site are listed in the RCRIS CORRACTS or TSD databases.

Resource Conservation and Recovery Information System Generators/Transporters (RCRIS Gen/Trans)

This list includes any operation that generates or transports hazardous waste and that must obtain a hazardous waste generator identification number or transporter permit.

The Site is not listed on the RCRIS Gens/Trans database. The database search identified two (2) RCRA Small Quantity Generators (SQGs) and one (1) Conditionally Exempt Small Quantity Generator (CESQG) within a one-quarter mile radius of the Site.

The following sites listed in the RCRIS Gen/Trans database have the potential to impact the environmental integrity of the Site:

Listing	Distance/ Direction	Assumed Hydraulic Gradient	Map ID Number	Status/Available Data
“Sam’s Bayside Cleaners” 200-03 32 nd Avenue, Bayside, NY	1/8-1/4 mile west southwest	Upgradient	C14	This facility is listed in the RCRA CESQG for generation of ignitable waste and halogenated solvents. This facility is also listed in the FINDS, NY Drycleaners, Historic Cleaner, and NY Manifests databases. This facility is considered a REC due to its distance (less than one-quarter mile) and proximity (upgradient) to the Site.

PHASE I ENVIRONMENTAL SITE ASSESSMENT
 PROPOSED PRE-KINDERGARTEN / PUBLIC SCHOOL / DOE FACILITY
 203-05 32ND AVENUE
 QUEENS, NEW YORK 11361

Listing	Distance/ Direction	Assumed Hydraulic Gradient	Map ID Number	Status/Available Data
“Porcelain Refinishing Corp.” 199-05 32 nd Street, Flushing, NY	1/8-1/4 miles west southwest	Upgradient	E34	This facility is listed in the RCRA SQG database with several compliance-related violations. Additionally, this facility is listed in the FINDS and NY Manifest databases. This facility is considered a REC due to its distance (less than one-quarter mile) and proximity (upgradient) to the Site.

The RCRIS Gen/Trans listing is merely a listing of all facilities that, due to the amount of hazardous waste generated, are required to register with the USEPA for tracking purposes, but are not necessarily those with reported contamination incidents. Based on distances, current regulatory status and the absence of reported releases, the remaining listed facilities are unlikely to have an impact on the environmental integrity of the Site

Federal Institutional Control/ Engineering Control Registries

These registries are listings of sites with engineering and institutional controls in place. Engineering controls include varies forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Neither the Site nor any facilities located within one-half-mile from the Site are listed in the Federal Institutional Control/ Engineering Control Registries database.

Emergency Response Notification System (ERNS)

The Emergency Response Notification System (ERNS) is a national database used to collect information on reported releases of oil and hazardous substances.

The Site is not listed on the ERNS database.

Toxic Release Inventory System (TRIS)

TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Neither the Site nor any other facilities within a one-quarter-mile radius of the Site are listed in the TRIS database.

New York State Inactive Hazardous Waste Disposal Sites (SHWS)

The New York State Inactive Hazardous Waste Sites database, compiled by the NYSDEC, maintains information regarding the investigation and cleanup of suspected hazardous waste sites.

Neither the Site nor any other facilities within a one-mile radius of the Site are listed in the SHWS database.

New York State Deleted Inactive Hazardous Waste Disposal Sites (DEL SHWS)

The New York State Deleted Inactive Hazardous Waste Disposal Sites database, compiled by the NYSDEC, maintains information regarding sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites.

Neither the Site nor any other facilities within a one-mile radius of the Site are listed in the DEL SHWS database.

Hazardous Substance Waste Disposal Site Inventory (HSWDS)

The list includes any known or suspected hazardous substance waste disposal sites. Also included are sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites and non-Registry sites that USEPA Preliminary Assessment (PA) reports or Site Investigation (SI) reports were prepared. Hazardous Substance Waste Disposal Sites are eligible to be Superfund sites. The sites on the list will not automatically be made Superfund sites, rather each site will be further evaluated for listing on the Registry.

Neither the Site nor any other facilities within a one-half-mile radius of the Site are listed in the HSWDS database.

Solid Waste Management Facilities (SWMF)

The SWMF database is a comprehensive listing of State permitted/recorded solid waste facilities.

Neither the Site nor any other facilities within a one-half-mile radius of the Site are listed in the SWMF database.

Vapor Reopened

“Vapor Intrusion” refers to the process by which volatile chemicals move from a subsurface source into the indoor air of overlying or adjacent buildings. The subsurface source can either be contaminated groundwater or contaminated soil which releases vapors into the pore spaces in the soil. Improvements in analytical techniques and knowledge gained from site investigations in New York and other states has led to an increased awareness of soil vapor as a medium of concern and of the potential for exposures from the soil vapor intrusion pathway. Based on this additional information, New York State is currently re-evaluating previous assumptions and decisions regarding the potential for soil vapor intrusion exposures at sites. As a result, all past, current, and future contaminated sites will be evaluated to determine whether these sites have the potential for exposures related to soil vapor intrusion.

Neither the Site nor any facilities located within one-mile from the Site are listed in the Vapor Reopened database.

New York State Spills Information Database (NY Spills)/Leaking Underground Storage Tanks (LTANKS)

The NY Spills database, including LTANKS sites, was researched to identify listings within one-half mile of the Site.

The Site is not listed in the NY Spills/LTANKS database. The database identified 78 reported NY Spills incidents and 13 reported LTANKS incidents within a one-half-mile radius of the Site.

Based on distance, location, and/or type of release and cleanup completed, the properties listed in the NY Spills/LTANKS database are not expected to negatively impact the Site.

Petroleum Bulk Storage Tanks (USTs/ASTs)

The NYSDEC PBS tank database was researched to identify listings for the Site and properties located within one-quarter mile from the Site.

The Site is not listed in the PBS tank database. The databases identified the presence of 1 PBS tank facility located within one-quarter-mile radius of the Site.

The PBS Tank database is merely a listing of all facilities that are required to register their storage tanks for tracking purposes and not necessarily those with reported contamination incidents. Based on the absence of reported releases, distances from the Site and hydraulic gradient, the facility listed in the PBS Tank database is not expected to have an impact on the environmental integrity of the Site.

New York State Voluntary and Brownfields Cleanup Program (VCP/BCP)

The NYSDEC Voluntary and Brownfields Cleanup Programs database was researched to identify listings for the Site and within a one-mile radius of the Site.

Neither the Site nor any other facilities within a one-mile radius of the Site are listed in the NYSDEC Voluntary and Brownfields Cleanup Programs database.

Registered Dry Cleaners

The registered dry cleaners database was researched to identify listings within one-half mile of the Site.

The Site is not listed as a registered dry cleaner. The database identified six registered dry cleaners within a one-half-mile radius of the Site. The following site listed in the Registered Dry Cleaner database has the potential to impact the environmental integrity of the Site:

PHASE I ENVIRONMENTAL SITE ASSESSMENT
 PROPOSED PRE-KINDERGARTEN / PUBLIC SCHOOL / DOE FACILITY
 203-05 32ND AVENUE
 QUEENS, NEW YORK 11361

Listing	Distance/ Direction	Assumed Hydraulic Gradient	Map ID Number	Status/Available Data
“Bayside Cleaners” 200-03 32 nd Avenue, Bayside, NY	1/8-1/4 mile west southwest	Upgradient	C13 / C15	This facility has been a registered dry cleaner since 2008. Additionally, this facility is listed in the RCRA CESQG, NY Manifests, Historic Cleaners, and FINDS databases. This facility is considered a REC due to its distance (less than one-quarter mile) and proximity (upgradient) from the Site.

The remaining registered dry cleaners identified within the search radius are not expected to have an impact on the environmental integrity of the Site due to their locations (hydraulically cross-gradient and downgradient) and/or distances (greater than one-eighth mile from the Site).

Manufactured Gas Plant Sites (Coal Gas)

The EDR manufactured gas plant database was researched to identify listings for the Site and within a one-mile radius of the Site.

Neither the Site nor any other facilities within a one-mile radius of the Site are listed in the manufactured gas plant database.

E-Designation Site Listing (E-Designation)

The E (Environmental) Designation would ensure that sampling and remediation take place on the subject properties, and would avoid any significant impacts related to hazardous materials at these locations. The E designations require that the owner of the sites conduct a testing and sampling protocol; and remediation where appropriate, to the satisfaction of city agencies.

Neither the Site nor any other facilities within a one-quarter radius of the Site are listed in the E-Designation database.

NY Manifest

The NY Manifest database is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

The Site is not listed in the NY Manifest database. There are six NY Manifest facilities listed in the regulatory agency database search report within one-quarter mile of the Site. The following sites listed in the NY Manifest database have the potential to impact the environmental integrity of the Site:

PHASE I ENVIRONMENTAL SITE ASSESSMENT
 PROPOSED PRE-KINDERGARTEN / PUBLIC SCHOOL / DOE FACILITY
 203-05 32ND AVENUE
 QUEENS, NEW YORK 11361

Listing	Distance/ Direction	Assumed Hydraulic Gradient	Map ID Number	Status/Available Data
“Bayside Cleaners” 200-03 32 nd Avenue, Bayside, NY	1/8-1/4 mile west southwest	Upgradient	C15	This dry cleaning facility is listed in the NY Manifest database for transport and disposal of halogenated solvents since 1998. Additionally, this facility is listed in the RCRA CESQG, Dry Cleaners, Historic Cleaners, and FINDS databases. This facility is considered a REC due to its distance (less than one-quarter mile) and proximity (upgradient) to the Site.
“Porcelain Refinishing Corp.” 199-05 32 nd Street, Flushing, NY	1/8-1/4 miles west southwest	Upgradient	E34	This facility is listed in the NY Manifest database for transport and disposal of non-halogenated solvents and ignitable wastes since 2003. This facility is also listed in the FINDS and RCRA SQG databases. This facility is considered a REC due to its distance (less than one-quarter mile) and proximity (upgradient) to the Site.

The remaining facilities listed in the NY Manifest database are not expected to have an impact on the environmental integrity of the Site since the facilities do not have listed RCRA-violations associated with their hazardous waste generation activity, are located greater than one-eighth mile from the Site, and/or are located in a hydraulically downgradient direction.

EDR US Historic Auto Stations

The EDR US Historic Auto Stations are listings compiled by EDR of potential gas station / filling station / service station sites. According to the database, “the categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station etc.”

The Site is not listed in the EDR US Historic Auto Stations database. The database identified the presence of three (3) sites in the EDR US Historic Auto Stations database within one-quarter-mile radius of the Site. The sites identified within the search radius are not expected to have an impact on the environmental integrity of the Site due to their distances (greater than one-eighth mile from the Site).

EDR US Historic Cleaners

The EDR US Historic Cleaners are listings compiled by EDR of potential dry cleaner sites. According to the database, “the categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc.”

The Site is not listed in the EDR US Historic Cleaners database. The database identified the presence of 17 sites in the EDR US Historic Cleaners database within one-quarter-mile radius of the Site. The following sites listed in the EDR US Historic Cleaners database may have the potential to impact the environmental integrity of the Site and are considered RECs:

Listing	Distance/ Direction	Assumed Hydraulic Gradient	Map ID Number	Status/Available Data
200-03 32 nd Avenue, Queens, NY	1/8-1/4 mile west southwest	Upgradient	C13	This facility is listed as “Bayside Cleaners” from 2007 to 2009. This facility is also listed in the RCRA CESQG, FINDS, NY Manifests, and NY Drycleaners databases. This facility is considered a REC because of its use of hazardous substances and its distance (less than one-quarter mile) and proximity (upgradient) to the Site.
200-19 32 nd Avenue, Queens, NY	1/8-1/4 mile west southwest	Upgradient	C21	This facility is listed as “Maspeth Dry Cleaners” from 2008 to 2012 and was identified during Site reconnaissance as operational. This facility is considered a REC due its distance (less than one-quarter mile) and proximity (upgradient) from the Site.

The remaining facilities listed in the EDR US Historic Cleaners database are not expected to have an impact on the environmental integrity of the Site since the facilities do not have any records of hazardous waste generation activity, are specifically listed as “Laundromats”, are located greater than one-eighth mile from the Site, and/or are located in a hydraulically cross- or downgradient direction.

6.2 Local Regulatory Agency Research

A review of local records for the Site was accomplished by contacting offices of New York City regulatory agencies. The results of the review of local records are presented below. Copies of the correspondences are included in *Appendix L*.

New York City Department of Buildings (NYCDOB)

NYCDOB records for the Site were reviewed to determine whether there were any references to buildings, tanks or other structures, property usage or inspection reports that may have indicated the presence, past use, or release of hazardous substances, wastes or petroleum products within the Site.

The review of NYCDOB records for the Site indicated that there are 9 complaints, 19 Department of Buildings (DOB) violations, and 5 Environmental Control Board (ECB) violations associated with the Site. The complaints have been resolved and pertain to damaged gutters, decreased parking spaces, unauthorized use of the space for catering, non-compliance with C of O by using facility for a day camp, a sewage backup in basement, piles of debris in parking area, and absence of sprinkler system in banquet hall. None of the open or closed DOB and ECB violations pertained to environmental issues; therefore, RECs were not identified during a review of NYCDOB records.

New York City Fire Department (FDNY)

The FDNY is responsible for the enforcement of local fire codes pertaining to the use and storage of flammable and hazardous materials. FDNY maintains public records with regard to tanks in six separate databases: (1) Total amount and size of existing fuel oil/heating oil; (2) Total amount and size of removed or sealed fuel oil/heating oil; (3) Total amount and size of existing buried motor vehicle tanks; (4) Total amount and size of removed or sealed motor vehicle tanks; (5) Most recent tank/piping test; (6) History of Buried Tank Leaks. Each of the databases was searched in a record search form dated February 17, 2015.

TRC has not yet received a response from the FDNY. Upon receipt of this information, TRC will review the response and, if conclusions contained within this report are affected, TRC will submit an addendum to the NYCSCA.

New York City Department of Health and Mental Hygiene (NYCDHMH)

The NYCDHMH, Bureau of Environmental Investigations (BEI) maintains files of health related environmental incidents in the City of New York. These incidents may include spills of hazardous chemicals, citizen's complaints regarding asbestos issues, or reports of chemical odors or fumes. NYCDHMH information concerning the Site was requested in a formal letter dated February 17, 2015.

TRC has not yet received a response from the NYCDHMH. Upon receipt of this information, TRC will review the response and, if conclusions contained within this report are affected, TRC will submit an addendum to the NYCSCA.

New York City Department of Environmental Protection (NYCDEP)

The NYCDEP maintains files of incidents involving environmentally regulated materials. The records maintained by NYCDEP include reports of spills of hazardous chemicals and citizen's complaints on environmental issues. NYCDEP information concerning the Site was requested in a formal letter dated February 17, 2015.

TRC has not yet received a response from the NYCDEP. Upon receipt of this information, TRC will review the response and, if conclusions contained within this report are affected, TRC will submit an addendum to the NYCSCA.

7.0 USER RESPONSIBILITIES

7.1 Environmental Liens or Activity and Use Limitations

EDR, in conjunction with National Real Estate Information Services, performed an environmental lien search for the Site. The results of the search indicate that no environmental liens or activity and use limitations associated with the Site were identified. The Environmental Lien Search Report is provided in *Appendix K*.

7.2 Valuation Reduction for Environmental Issues

The User Questionnaire completed by Mr. Michael Sherwood of the NYCSCA indicates that he has no knowledge regarding the relationship of the purchase price of the Site to the fair market value of the Site. The User Questionnaire is provided in *Appendix K*.

7.3 Specialized Knowledge or Experience of the User

The User Questionnaire completed by Mr. Michael Sherwood of the NYCSCA indicates that the NYCSCA is not currently aware of any specialized knowledge or experience that is material to RECs in connection with the Site. Additionally, the NYCSCA is not currently aware of any specialized knowledge or experience that may be important to the screening of VECs in connection with the Site. The User Questionnaire is provided in *Appendix K*.

7.4 Commonly Known or Reasonably Ascertainable Information

The User Questionnaire completed by Mr. Michael Sherwood of the NYCSCA indicates that the NYCSCA is not currently aware of any commonly known or reasonably ascertainable information within the local community about the Site that is material to RECs in connection with the Site. Additionally, the NYCSCA is not currently aware of any commonly known or reasonably ascertainable information within the local community important to the screening of VECs in connection with the Site. The User Questionnaire is provided in *Appendix K*.

7.5 The Degree of Obviousness of the Presence or Likely Presence of Contamination At The Property

The User Questionnaire completed by Mr. Michael Sherwood of the NYCSCA indicates that the NYCSCA is not currently aware of any *obvious* indicators that point to the presence or likely presence of releases at the Site. Additionally, the NYCSCA is not currently aware of any obvious indicators important to the screening of VECs in connection with the Site. The User Questionnaire is provided in *Appendix K*.

8.0 SITE RECONNAISSANCE AND INTERVIEWS

8.1 Methodology and Limiting Conditions

The Site reconnaissance was performed on February 18, 2014 by TRC representative Ms. Jenna Raup as well as members of the NYCSCA IEH Survey and Design, Architecture and Engineering, Construction Management, and Real Estate Divisions. TRC was escorted by Mr. Jamie Cueller, the facility custodian, representing the Site owner during the Site reconnaissance. Additionally, Ms. Natalie Winter, who represents the Site owner, was available for interviews. The temperature during the Site visit was approximately 25 degrees Fahrenheit and the weather conditions were sunny. Snow cover was present on portions of the Site and a full inspection of the condition of exposed areas of the Site could not be performed. This is considered a data gap and limiting condition.

8.2 Site Reconnaissance

The Site is located at 203-05 32nd Avenue, Queens, New York 11361. The legal description of the Site is Block 6030, Lot 40. The Site consists of a paved parking area, a landscaped area, and a U-shaped brick building encompassing an approximately 25,000 sf footprint and comprised of two sections, an eastern section and a western section. The eastern section, which is occupied by the “Lowell School”, is two-stories with a basement. The first and second stories consist of classroom units and the basement consists of offices, a library, tutoring rooms, bathrooms, a gymnasium/auditorium, a boiler room, an electrical room, an out-of-service kitchen, and a storage room. A portion of the western section is currently leased weekly to a dance group and is otherwise unoccupied. The remainder of the western section consists of offices, a chapel, a synagogue, a banquet room, and a kitchen with a partial second floor.

Interior finishes consist of plaster and cinderblock walls, plaster ceiling and ceiling tiles, vinyl floor tiles, terrazzo flooring, carpet and wood flooring, and fluorescent lighting fixtures. The eastern section of the building is heated with two natural gas fired boilers located in the basement and cooled by window-mounted air conditioning (AC) units. The western section of the building is heated with a natural gas fired boiler located in the second story space above the kitchen and cooled with a natural gas-fired AC unit located on the roof. Mr. Cuellar indicated that the facility was previously heated via fuel oil-fired boiler. Decommissioned fuel oil piping connections were identified in the basement boiler room. Although the fuel oil tank was removed prior to Mr. Cuellar’s employment at the Site, Mr. Cuellar believed that the fuel oil tank was located in the outdoor area between the eastern and western sections of the building.

Several floor drains, which are connected to the sanitary sewer, were identified in the basement hallways in the eastern section of the building. A sump was also identified in the basement storage room on the eastern section of the building. Minor staining was observed in the vicinity of the sump and floor drain located in the storage room. The staining represents a de minimis condition and is not considered a REC/VEC.

The Site is bordered to the north by residential buildings; to the east by 204th Street followed by Bayside High School athletic fields (athletic track, baseball fields, and tennis courts); to the south by 32nd Avenue followed by detached two-story single-family residences; and to the west by 203rd Street followed by two-family residences.

Electricity and natural gas are supplied by the Consolidated Edison Company of New York. Potable water and sanitary waste disposal are provided by the NYCDEP.

Based on the review of the Sanborn Maps, no significant changes to the Site have been noted since the most recent Sanborn Map.

8.3 Current and Historical Use Interviews

The following knowledgeable persons were interviewed with regard to the Site pursuant to ASTM 1527-13 Section 10:

8.3.1 Current Property Owner

Name	Title/Company	Telephone #	Years Associated with Site
Ms. Natalie Winter	Owner representative	Unknown	42

Ms. Natalie Winter represents the Site owner and was available during Site reconnaissance for an interview. Ms. Winter indicated that she was not aware of any activity and use limitations associated with the Site. Ms. Winter mentioned that there has been issues with roof leakage in the western section of the building. Ms. Winter indicated that she was not aware of any specific environmental issues associated with the Site or the surrounding community. Information obtained from the interview is included within this report where applicable.

8.3.2 Current Site Operator or Key Site Manager

Name	Title/Company	Telephone #	Years Associated with Site
Mr. Jamie Cuellar	Owner representative, facility custodian	Unknown	15

Mr. Jamie Cuellar, who has been the facility custodian since approximately 2000, is identified as the Site Operator or Key Site Manager by Ms. Natalie Winter, and was available for interviews. Mr. Cuellar indicated that he was not aware of any activity and use limitations associated with the Site. Mr. Cuellar mentioned that the facility was previously heated with fuel oil and there was a tank in the outdoor area between the eastern and western building sections. Mr. Cuellar also indicated that he was not aware of any specific environmental issues associated with the Site or the surrounding community. Information obtained from this interview is included within this report where applicable.

8.3.3 Site Occupants

Name	Title/Company	Telephone #	Years Associated with Site
Mr. Jamie Cuellar	Owner representative, facility custodian	Unknown	15

The Site is currently occupied by the “Lowell School” and part-time by a dance group. Mr. Jamie Cuellar, who has been the facility custodian since approximately 2000, maintains the building. As noted above, Mr. Cuellar indicated that he was not aware of any activity and use limitations associated with the Site. Mr. Cuellar mentioned that the facility was previously heated with fuel oil and there was a tank in the outdoor area between the eastern and western building sections. Mr. Cuellar also indicated that he was not aware of any specific environmental issues associated with the Site or the surrounding community. Information obtained from this interview is included within this report where applicable.

8.3.4 Past Owners, Operators and Occupants

There were no prior owners or occupants available for interviews; however, sufficient information about the Site and surrounding area could be obtained from the available records, and this data gap is not likely to alter the conclusions of this report.

8.3.5 Report User

Name	Title/Company	Telephone #	Years Associated with Site
Mr. Michael Sherwood	Industrial Hygienist/NYCSCA IEH Division	718-472-8000	<1

TRC was informed by Mr. Sherwood that the NYCSCA is considering purchasing the Site for use and/or construction of a Pre-Kindergarten, Public School, or DOE facility.

8.4 Hazardous Substances and Petroleum Products Storage and Handling

8.4.1 Hazardous Substances

There was no evidence of the storage of hazardous substances at the Site, other than typical quantities of janitorial cleaning products, during the Site reconnaissance.

8.4.2 Petroleum Products Storage and Handling

There was no evidence of petroleum products observed during the Site reconnaissance. Mr. Cuellar stated that prior to natural gas fired boilers, fuel oil fired boilers were utilized to heat the building. It is Mr. Cuellar’s understanding that an underground fuel oil storage tank was previously located in the outdoor area of the facility between the eastern and western sections of the building. No regulatory records of this tank were discovered during performance of this assessment.

8.5 Solid Waste Generation, Storage and Disposal

Solid waste generated on the Site is disposed of by the City of New York. There was no evidence of dumping or material mismanagement observed during the Site reconnaissance.

8.6 Polychlorinated Biphenyls (PCBs)

Polychlorinated biphenyls (PCBs) are toxic components of dielectric and hydraulic fluids that were formerly used in electrical equipment such as transformers and hydraulic elevators/lifts and in construction materials such as exterior caulking. The manufacture and use of PCBs was banned in the United States in 1978.

Suspect PCB-containing fluorescent light ballasts were noted throughout the Site building. Since the Site building was constructed in 1960, the potential for the presence of PCB-containing light ballasts and exterior caulk is considered an environmental concern.

8.7 Asbestos-Containing Material (ACM)

TRC conducted a limited visual survey (i.e., within accessible areas only) for the presence of suspect ACM within the Site. The intent of the building survey was to identify exposed suspect ACM through a preliminary non-destructive survey. In accordance with the NYCSCA scope of services, no sampling of suspect ACM was performed during this investigation. Pursuant to applicable asbestos control regulations and guidelines, TRC considered any observed suspect materials to be asbestos-containing.

TRC observed suspect ACM in the form of ceiling tiles, plaster, floor tiles and associated mastic, and exterior caulk. Since the Site building was constructed in 1960 the potential presence of suspect ACM is considered an environmental concern.

8.8 Lead-Based Paint (LBP) Survey

During the site inspection, a limited visual assessment of accessible painted surfaces was performed. No sampling or intrusive work was performed, as this is outside the scope of this Phase I ESA. In accordance with NYCSCA's current interior LBP inspection protocol, all painted interior surfaces are assumed to be LBP. For this Site, the interior and exterior painted surfaces were generally found to be in good condition with limited evidence of damage or disrepair. Any interior paint that is damaged or in disrepair, or that may be disturbed in any way during construction activities, must be handled in accordance with NYCSCA policies and procedures. Painted surfaces were observed on the exterior of the building. These surfaces include the exterior doors, windows, ceilings and walls. If construction work may disturb these painted surfaces, they should be inspected, and tested as appropriate, in accordance with NYCSCA's current exterior LBP policies and procedures.

8.9 Regulatory Compliance

There were no regulatory compliance issues noted during the Site reconnaissance.

8.10 Electromagnetic Fields

There were no suspect sources of aboveground electromagnetic fields (i.e., high voltage power lines or electrical substations) identified in close proximity to the Site.

8.11 Other Environmental Conditions (Methane, mold, etc.)

Ms. Winter reported that there has historically been water intrusion in the western section of the building. Additionally, Mr. Cuellar reported that occasionally there is water intrusion in the basement following rain events and staining was observed in the vicinity of a sump and floor drain located in the basement storage room. The potential for mold growth associated with water damaged materials is considered an environmental concern. Based on the review of historic sources, including historic Sanborn Maps, topographic maps, and visual observations of the Site and surrounding area, there was no evidence of historic filling of wetlands or organic deposits on the Site. Therefore, methane is not considered an environmental concern at the Site.

9.0 SUMMARY OF FINDINGS

The Site is located at 203-05 32nd Avenue, Queens, New York 11361. The legal description of the Site is Block 6030, Lot 40.

The Site is 54,000 sf in area and is improved by a paved parking area, a landscaped area, and a U-shaped building encompassing an approximately 25,000 sf footprint, which consists of two sections, an eastern section and a western section. The eastern section, which is occupied by the “Lowell School”, is two-stories with a basement. The first and second stories consist of classroom units and the basement consists of offices, a library, tutoring rooms, bathrooms, a gymnasium/auditorium, a boiler room, an electrical room, an out-of-service kitchen, and a storage room. A portion of the western section is currently leased weekly to a dance group and is otherwise unoccupied. The remainder of the western section consists of offices, a chapel, a synagogue, a banquet room, and a kitchen with a partial second floor.

The Site is bordered to the north by residential buildings; to the east by 204th Street followed by Bayside High School athletic fields (athletic track, baseball fields, and tennis courts); to the south by 32nd Avenue followed by detached two-story single-family residences; and to the west by 203rd Street followed by two-family residences.

The Site was undeveloped and part of a golf course prior to 1960 at which time the current Site building was constructed and occupied by Bayside Jewish Center. The eastern section of the Site building has been occupied by various educational institutions since construction. The western section of the building has been utilized as part of the Bayside Jewish Center from construction until recently.

The NYCDCP Zoning Map 10c indicates that the Site is designated as zone R3X, which is a low density residential district consisting of one- and two-family detached homes. Based on a review of the CEQR Environmental Designations, the Site does not have an “E”-Designation.

Based on field observations, the topography of the surrounding area is generally flat. According to the USGS 7.5-Minute Quadrangle Map (Jamaica, NY 1994) and information contained in the regulatory agency database report, the elevation is approximately 100 feet amsl.

Little Neck Bay is located approximately 1 mile to the east of the Site. Based on the review of the USGS Hydraulic Conditions Map for Long Island, NY 2006 (*Long Island Depth to Water Viewer and Groundwater Conditions on Long Island New York in 2006*), the groundwater flow in the area of the Site is assumed to be to the east towards Little Neck Bay. The online *Long Island Depth to Water Viewer* indicated that the depth to groundwater is approximately 75 feet bgs.

The Phase I ESA identified on-Site RECs associated with the potential existence of a former fuel oil underground storage tank located in the landscaped area of the Site and the potential historic use of pesticides and herbicides in connection with the past use of the Site as a golf course and for agricultural purposes. Off-Site RECs included the presence of two nearby dry cleaners and a nearby porcelain refinishing company listed in regulatory agency databases for hazardous waste generation of halogenated solvents. Environmental concerns include potential ACM, LBP, PCB-containing materials, water damaged materials and associated potential mold growth.

10.0 CONCLUSIONS AND RECOMMENDATIONS

TRC has performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-13 and the requirements of NYCSCA. Any additions to, exceptions to, or deletions from this practice are described in Section 2.0 of this report.

This Phase I ESA has revealed the following RECs and/or VECs and in connection with the Site:

On-Site RECs/VECs:

- According to Site representatives, there was previously a fuel oil underground storage tank located in the landscaped area of the Site. Additionally, Site reconnaissance revealed decommissioned fuel lines within the basement boiler room. Potential historic releases from this fuel oil underground storage tank may have impacted the Site.
- Review of historic topographic maps and aerial photographs revealed that the Site was historically used as part of a golfing facility and for agricultural purposes. The potential historic use of pesticides and herbicides in connection with the past use of the Site as a golf course and for agricultural purposes is considered a REC.

Off-Site RECs/VECs:

- Review of the regulatory agency database report identified “[Sam’s] Bayside Cleaners” located approximately 0.14 miles upgradient of the Site at 200-03 32nd Avenue in the NY Drycleaners and Historic Cleaners databases; and in the RCRA CESQG, NY Manifests and FINDS databases for generation, transport and disposal of ignitable and halogenated solvent wastes.
- Review of the regulatory agency database report and Site reconnaissance revealed that a dry cleaner, “Maspeth Dry Cleaner”, is located in close proximity (less than one-quarter mile) and upgradient of the Site.
- Review of the regulatory agency database report identified “Porcelain Refinishing Corp.”, located approximately 0.2 miles upgradient of the Site, in the RCRA-SQG, FINDS, and NY Manifests databases for generation and disposal of ignitable waste and halogenated solvents. This facility was listed in the RCRA SQG database with several compliance violations.

Summary of Environmental Concerns

This Phase I ESA has revealed evidence of environmental concerns in connection with the Site, including the following:

- Based on the age of the Site building, suspect ACM may be present.
- Suspect LBP on interior and exterior surfaces was observed in the building during the Site inspection. Based on the age of the building, the painted surfaces may contain lead.

- Fluorescent light ballasts and exterior caulking were observed during the Site inspection. Since the Site building was constructed before 1978, PCB-containing materials and equipment may be present.
- Minor water damage in the ceiling was reported during Site interviews, however, was not observed during Site reconnaissance. Evidence of water intrusion (i.e., stained concrete) was observed in the vicinity of a sump and floor drain in the basement storage room. There is a potential for mold growth associated with the reported water damage.

Recommendations

TRC recommends performing a Phase II Environmental Site Investigation to determine whether the identified REC/VEC has affected the suitability of the Site to be utilized as a Pre-Kindergarten, Public School, or DOE facility. In addition, TRC recommends performing a survey to identify ACM, LBP, and/or PCB-containing building materials which may be disturbed by demolition, renovation, or re-development of the Site. If identified, ACM, LBP and/or PCB-containing building materials should be properly managed during such activities. Additionally, mold and water damaged materials should be removed and replaced and the source(s) of the water infiltration should be eliminated.

11.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

TRC has performed a Phase I ESA of the proposed Pre-Kindergarten, Public School, or DOE facility located at 203-05 32nd Avenue, Queens, New York 11361 (the "Site"). The scope of the Phase I ESA was consistent with the requirements of ASTM Standard Practice E 1527-13 and of NYCSCA. Signatures of the Environmental Professionals who participated in conducting this Phase I ESA are provided below. Qualifications for these individuals are provided in *Appendix M*. TRC declares that to the best of their professional knowledge and belief, they meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312. TRC has the specific qualifications based on education, training and experience to assess the subject property. TRC has developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

TRC Engineers, Inc.

PREPARED BY: _____

Jenna Raup
Project Scientist



REVIEWED BY: _____

Lindsay Metcalf
Junior Environmental Scientist (Environmental Professional)



REVIEWED BY: _____

Charles Guder
Senior Project Manager/ QC Officer



12.0 REFERENCES

Resources Consulted:

- Environmental Data Resources, Inc. (EDR) Regulatory Agency Database Search Report, February 12, 2015.
- EDR City Directory Abstract: 1922 - 2013.
- EDR Sanborn Maps: 1903 - 2006.
- EDR Aerial Photographs: 1924 - 2011.
- EDR Historical Topographic Maps: 1897- 1995.

Regulatory Agencies Contacted:

- New York City Department of Buildings, 02/18/2015.
- New York City Fire Department, 02/17/2015.
- New York City Department of City Planning, 02/17/2015.
- New York City Department of Environmental Protection, 02/17/2015.
- New York City Department of Health and Mental Hygiene, 02/17/2015.
- New York State Department of Health, 02/17/2015.
- New York State Department of Environmental Conservation, 02/17/2015.
- United States Environmental Protection Agency, 02/17/2015.

Documents and Maps:

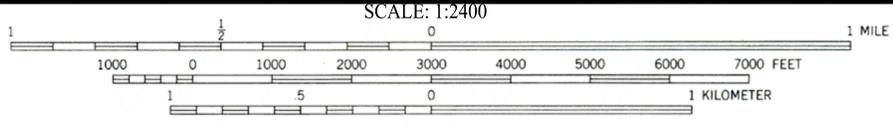
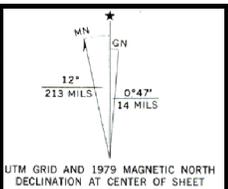
- ASTM International (ASTM) 2013, “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process”, ASTM Designation E 1527-13.
- ASTM 2010, “Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions”, ASTM Designation E 2600-10.
- Buxton, Herbert, Soren, Julian, Posner Alex, and Shernoff, Peter, “Reconnaissance of the Ground-Water Resources of Kings and Queens Counties, New York.”
- Long Island Depth to Water Viewer and Groundwater Conditions on Long Island New York in 2006
- Federal Emergency Management Agency, “Flood Insurance Rate Map, Panel No. 3604970118F.”
- New York City Department of City Planning, “New York City Zoning Map 10c.”
- United States Fish and Wildlife, “National Wetlands Inventory Index Map.”

13.0 APPENDICES

- Appendix A** - Site Location Map
- Appendix B** - Site Plan
- Appendix C** - Site Photographs
- Appendix D** - National Wetlands Inventory Map
- Appendix E** - FEMA Flood Insurance Rate Map
- Appendix F** - Historical Topographic Maps
- Appendix G** - Historical Aerial Photographs
- Appendix H** - Sanborn Fire Insurance Maps
- Appendix I** - Regulatory Agency Database Report
- Appendix J** - City Directory Abstract
- Appendix K** - Prior Reports/ Supporting Documentation
- Appendix L** - Records of Communication & Agency Correspondence
- Appendix M** - Qualifications of Environmental Professionals

APPENDIX A
SITE LOCATION MAP

Path: \\WTPA-NYC-environmental\Shared\Projects\NYCSCA Contract: C000013008\13008\232032 - 203-05 32nd Ave\Phase I ESA\Figures\TRC Working Draw\Figure 1 - Site Location Map.dwg - Date/Time: Wed, 25 Feb 2015 - 11:30am - User Name: HBelgado - Layout Tab: 8.5X11



CONTOUR INTERVAL 10 FEET
 NATIONAL GEODETIC VERTICAL DATUM OF 1929
 DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS MEAN LOW WATER
 THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE

QUADRANGLE LOCATION

FLUSHING, N. Y.
 SE/4 HARLEM 15' QUADRANGLE
 40073-G7-TF-024

1966
 PHOTOREVISED 1979
 DMA 6265 IV SE—SERIES V821

MAP OBTAINED THROUGH USE OF MYTOPO TERRAIN NAVIGATOR PRO SOFTWARE.

TRC
 1430 BROADWAY, 10TH FLOOR
 NEW YORK, NEW YORK 10018
 212-221-7822

DESIGNED BY: JR
DRAWN BY: HD
CHECKED BY: CG
DATE: FEBRUARY 2015
SCALE: AS SHOWN
PROJECT NUMBER: 232032.0000.0000

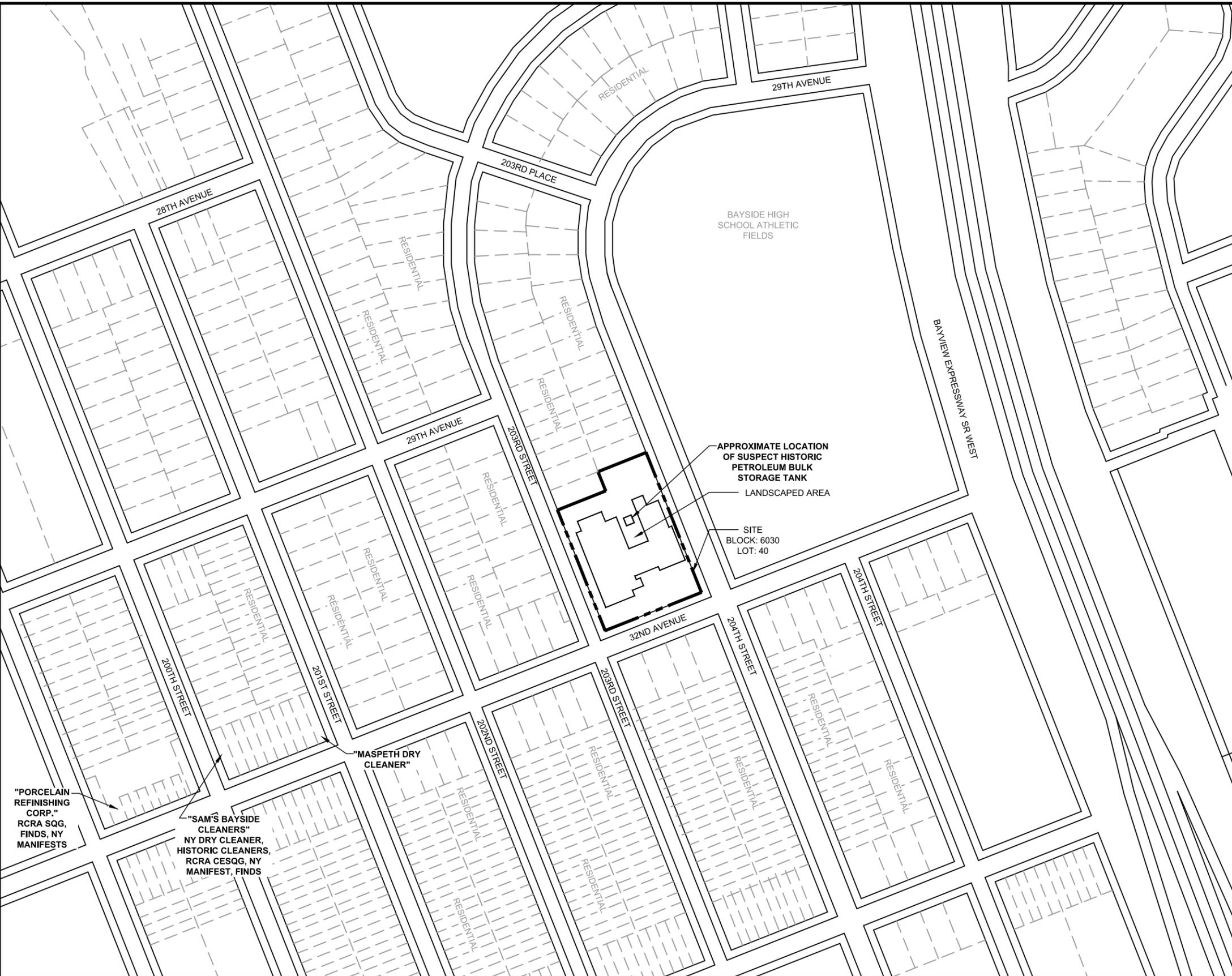
PROJECT NAME: NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY PHASE I ESA - 203-05 32ND AVENUE BLOCK: 6030 LOT: 40 QUEENS, NEW YORK 11361
DRAWING TITLE: SITE LOCATION MAP

FIGURE
1

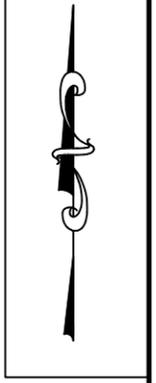
APPENDIX B

SITE PLAN

Path Name: I:\Projects\NYCSCA Contract 000013008\232032 - 203-05 32nd Ave\Phase I ESA\Figures\TRC Working Drawings\Figure 2 - Site Plan.dwg - Date: Tue, 17 Mar 2015 - 4:09pm - User Name: jRoup - Layout Tab: 11X17

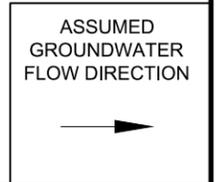


- LEGEND:**
- SITE BOUNDARY
 - LOT BOUNDARY
 - BUILDING FOOTPRINT
 - RES. RESIDENTIAL
 - CESQG CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR
 - RCRA RESOURCE CONSERVATION AND RECOVERY ACT
 - SQG SMALL QUANTITY GENERATOR

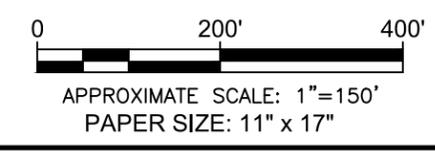


NOTE:
 RECOGNIZED ENVIRONMENTAL CONDITIONS ARE SHOWN IN **BOLD FONT**.

SOURCE:
 WWW.PROPERTYSHARK.COM



NO.	DESCRIPTION	BY	DATE



1430 BROADWAY, 10TH FLOOR
 NEW YORK, NEW YORK 10018
 212-221-7822

DESIGNED BY: JR
 DRAWN BY: HD
 CHECKED BY: CG
 DATE: FEBRUARY 2015
 SCALE: AS SHOWN
 PROJECT NUMBER: 232032.0000.0000

PROJECT NAME:
NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY
PHASE I ESA - 203-05 32ND AVENUE
BLOCK: 6030 LOT: 40
QUEENS, NEW YORK 11361

DRAWING TITLE:
 SITE PLAN

FIGURE
2

APPENDIX C
SITE PHOTOGRAPHS

Appendix C Phase I ESA Photograph Log



Photo 1: View of the southern façade of the Site building from the southeast.



Photo 2: View of the northern parking area of the Site.



Photo 3: View of entryway offices in eastern section of Site building.



Photo 4: View of classroom in basement of Site building.



Photo 5: View of library in basement of Site building.



Photo 6: View of classroom on first floor of the eastern section of the Site building.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
232032.0000 .0000	J. Raup	1 of 5	NYSCA	Bayside Jewish Center 203-05 32 nd Avenue Queens, New York 11361	

Appendix C Phase I ESA Photograph Log



Photo 7: View of bathrooms in the basement of the Site building.



Photo 8: View of janitorial closet in basement of Site building.



Photo 9: View of auditorium/gymnasium in the basement of the Site building.



Photo 10: View of dual natural gas fired boilers in the boiler room of the Site building.



Photo 11: View of decommissioned fuel oil piping in the boiler room of the Site building.



Photo 12: View of floor drain in the storage area in the basement of the Site building.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
232032.0000 .0000	J. Raup	2 of 5	NYSCA	Bayside Jewish Center 203-05 32 nd Avenue Queens, New York 11361	

Appendix C Phase I ESA Photograph Log



Photo 13: View of sump in the storage room in the basement of the Site building.



Photo 14: View of chapel.



Photo 15: View of hallway and Bayside Jewish Center offices on the western section of the Site building.



Photo 16: View of entryway to the western section of the Site building.



Photo 17: View of bar located in the western section of the Site building.



Photo 18: View of synagogue.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
232032.0000 .0000	J. Raup	3 of 5	NYSCA	Bayside Jewish Center 203-05 32 nd Avenue Queens, New York 11361	

Appendix C Phase I ESA Photograph Log



Photo 19: View of banquet hall located in the western section of the Site building.



Photo 20: View of refrigeration units located in the kitchen in the western section of the Site building.



Photo 21: View of kitchen located in the western section of the Site building.



Photo 22: View of boiler located above the kitchen in the western section of the Site building.



Photo 23: View of paints and janitorial supplies located behind the kitchen in the western section of the Site building.



Photo 24: View of the east adjoining property, "Bayside High School athletic fields", from the southwest.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
232032.0000 .0000	J. Raup	4 of 5	NYCSA	Bayside Jewish Center 203-05 32 nd Avenue Queens, New York 11361	

Appendix C Phase I ESA Photograph Log



Photo 25: View of 32nd Avenue from the west.



Photo 26: View of 203rd Street from the north.



Photo 27: View of 204th Street from the south.



Photo 28: View of dry cleaner located on the corner of 32nd Avenue and 201st Street.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
232032.0000 .0000	J. Raup	5 of 5	NYCSCA	Bayside Jewish Center 203-05 32 nd Avenue Queens, New York 11361	