PHASE I ENVIRONMENTAL SITE ASSESSMENT

for

2401 Third Avenue **Bronx, New York**

Prepared For:

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LANGAN

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EXECUTIVE SUMMARY

Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. (Langan) was retained by 2401 Third Avenue Associates, LLC (the "User") to prepare a Phase I Environmental Site Assessment (ESA) for the property located at 2401 Third Avenue in the Mott Haven section of the Bronx, New York ("Subject Property"). The Subject Property (Block 2319, Lot 2) is comprised of an approximate 67,000-square-foot irregularly shaped lot and contains an approximate 20,000-square-foot one-story building (no basement); asphalt-, concrete-, and cobblestone-paved exterior driving/storage areas; an approximate 10,500-square-foot private parking lot; and sparsely-vegetated areas. The Subject Property is bordered to the northwest and northeast by commercial properties, to the southeast by the Third Avenue Bridge, and to the southwest by the Harlem River. The Subject Property has an "E" designation for air, noise, and hazardous materials as a result of the Port Morris/Bruckner Boulevard Rezoning (CEQR # 05DCP005X).

This Phase I ESA was conducted in accordance with the American Society for Testing Materials (ASTM) Practice E1527-13 (Standard Practice for ESA: Phase I ESA Process) and the United States Environmental Protection Agency's (USEPA) All Appropriate Inquiry (AAI) Rule. The objective of this Phase I ESA was to identify the presence or likely presence, use, or release on the Subject Property of hazardous substances or petroleum products as defined in ASTM E1527-13 as a recognized environmental condition (REC) and to satisfy the AAI needed to qualify for the bona fide prospective purchaser liability protections available under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA).

The following RECs were identified:

REC 1 – Current and Historical Manufacturing and Industrial Use

The Subject Property was historically used for manufacturing purposes since at least 1891. Historical operators include; J.L. Mott Iron Works (1891-1922), Hydraulic Steel Company (1922-1935), General Builders Supply Corporation (1935-1968), Brill Equipment Company (1949-1956), US Gear Manufacturing Company (1965-1971), Ohio Gasket Manufacturing Corporation (1971), and Mugler Richard Shoring Company, Inc. (Mugler Inc.) (1965-present). Inadvertent releases of solvents, petroleum products, metals, polychlorinated biphenyls (PCB) and/or other chemicals used during manufacturing operations may have adversely impacted soil, groundwater, building components and/or soil vapor. The Subject Property is presently operated by Mugler, Inc. for shoring equipment fabrication, storage, truck loading/unloading, and equipment repairs. As

such, there are typical tools, maintenance/repair materials, and miscellaneous equipment used and stored throughout. Discoloration and staining were apparent throughout the interior of the building, suggesting incidental releases of petroleum products during truck maintenance, and the concrete slab was compromised in several areas. Because fractures in the slab provide a conduit for spilled motor oils and/or petroleum products to impact subsurface conditions, current use by Mugler, Inc. constitutes a REC.

REC 2 – On-Site Petroleum Bulk Storage

The following historical underground storage tanks (USTs) were identified:

- One 550-gallon gasoline UST, located outside the southeast corner of the building, was reportedly closed-in place circa 1999 (see Figure 2).
- An area of patched concrete and an apparent abandoned fill port southeast of the building, which is suspected to be associated with another decommissioned UST, was identified during the site reconnaissance.
- One 1,550-gallone gasoline UST was identified on the 1935 through 1946 Sanborn maps.

Based on the known and suspected presence of historic tanks and lack of any documentation of tank closure, the historical USTs are a REC.

REC 3 – Current Historical Use of Surrounding Properties

Current and historical use of properties surrounding the Subject Property include a private garage (1946-1951), lubricating oils storage (1935-1983), two chemical corporations (1935-1947), a paint manufacturer (1951), a coal yard (1935-1951), an auto building (1908-1947), an auto house (1935-1944), a private garage (1935-1944), a printing facility (1935-1947), and several auto repair shops (2005-2012). In addition, an active New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) site was identified approximately 660 feet northeast (up-gradient) of the Subject Property. Based on investigations conducted to date, the primary contaminants of concern in soil and groundwater are petroleum related compounds. No information was provided with respect to the off-Site migration of contaminants; however, the Environmental Database Report (EDR) report indicates that the potential exists for off-Site migration of site-related contaminants in soil vapor. Potential petroleum and solvent releases associated with the historical surrounding property uses may have adversely impacted groundwater and/or soil vapor at the Subject Property and is considered a REC.

Historic RECs (HRECs), Controlled RECs (CRECs) or de minimis conditions were not identified.

Non-ASTM Matters

Asbestos, Lead, and Polychlorinated Biphenyls

A formal survey to identify asbestos containing materials (ACM), lead-based paint (LBP), and PCBs in building materials was not conducted as part of this Phase I ESA. Based on the age of the building, ACM, LBP, and PCB-containing materials are likely present.

Radon

According to the New York State Department of Health (NYSDOH), a total of 31 radon tests have been conducted in Bronx County with results indicating that 4% of living areas and 58% of basements have radon concentrations above 4 picocuries per liter (pCi/L). Based on this data, there is a potential for radon to accumulate in buildings; radon represents an environmental concern.

1.0 INTRODUCTION

Langan Project No. 170305901

Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. (Langan) was retained by 2401 Third Avenue Associates, LLC (the "User") to prepare a Phase I Environmental Site Assessment (ESA) for the property located at 2401 Third Avenue (Block 2319, Lot 2) in the Mott Haven section of the Bronx, New York ("Subject Property"). This Phase I ESA was performed in support of the User's due diligence prior to acquiring the Subject Property.

1.1 Purpose

The purpose of this Phase I ESA is to accomplish the following:

- (1) Identify Recognized Environmental Conditions (RECs) in connection with the Subject Property, as defined in The Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation E1527-13, which states: 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. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.
- (2) Satisfy the criteria of United States Environmental Protection Agency (USEPA) 40 Code of Federal Regulations (CFR) Part 312 Subpart C Standards and Practices §312.20 AAI Rule.

1.2 Scope of the ESA

This Phase I ESA was conducted utilizing a standard of good commercial and customary practice that is consistent with American Society for Testing and Materials (ASTM) E1527-13. Any significant scope-of-work additions, deletions, or deviations to ASTM E1527-13 are noted in Section 8 of this report. In general, the scope of this assessment consisted of obtaining information from the User; reviewing reasonably ascertainable information and environmental data relating to the Subject Property; reviewing maps and records maintained by federal, state,

and local regulatory agencies; interviewing persons knowledgeable about the Subject Property; and conducting a site inspection. The specific scope of this assessment included the following:

- 1. A site reconnaissance to characterize conditions and assess the Subject Property's location with respect to adjoining and surrounding property uses and natural surface features. The reconnaissance included the surrounding roads and observations of surrounding properties from public rights-of-way to identify obvious potential environmental conditions on neighboring properties. The site reconnaissance was conducted in a systematic manner focusing on the spatial extent of the Subject Property and then progressing to adjacent and surrounding properties. Photographs taken as part of the site reconnaissance are provided in Appendix A.
- 2. A review of ASTM Practice E 1527-13 User and Owner Questionnaires. Copies of these questionnaires are included in Appendix B.
- 3. A review of environmental databases maintained by the USEPA, state, and local agencies within the approximate minimum search distance. The environmental database report was provided by EDR, and the report is included in Appendix C.
- 4. Freedom of Information Act (FOIA) requests were sent to federal, state, and local agencies. Copies of the FOIA requests and responses are included in Appendix D.
- 5. New York City Department of Buildings (NYCDOB) records, a Planning Commission Zoning Map, and New York City Department of Finance (NYCDOF) records were reviewed. Available Deed Records, NYCDOB records and the Zoning Map and Tax Map information are included in Appendices E, F, G, and H, respectively.
- 6. A review of physical characteristics of the Subject Property through a review of referenced sources for topographic, geologic, soils, and hydrologic data.
- 7. A review and interpretation of aerial photographs, Sanborn Fire Insurance Maps (Sanborn Maps), historical topographic maps, and city directories to identify previous activities on and in the vicinity of the Subject Property. Copies are included in Appendices J, K, L, and, I, respectively.
- 8. A review of an Environmental Lien search for the Subject Property. A copy of the environmental lien search report is included in Appendix M.
- A review of published radon occurrence maps to determine if the Subject Property is located in an area with a propensity for elevated radon levels. A USEPA Radon Map is provided in Appendix N.

1.3 Assumptions, Limitations, and Exceptions

This Phase I ESA was prepared for 2401 Third Avenue Associates, LLC for the Subject Property located at 2401 Third Avenue in the Mott Haven section of the Bronx, New York. The report is intended to be used in its entirety. Excerpts taken from this report are not necessarily representative of the assessment findings. Langan cannot assume responsibility for use of this report for any property other than the Subject Property addressed herein, or by any other third party without a written authorization from Langan.

Langan's scope of services, which is described in Section 1.2, was limited to that agreed to with the User and no other services beyond those explicitly stated are implied. The services performed and agreed upon for this effort comports to those prescribed in the ASTM Standard E1527-13. Intrusive sampling (i.e. soil borings and groundwater sampling) was not performed as part of this Phase I ESA.

This Phase I ESA was not intended to be a definitive investigation of possible environmental impacts at the Subject Property. The purpose of this investigation was limited to determining if there is reason to suspect the possibility of RECs. It should be understood that even the most comprehensive Phase I ESA may fail to detect environmental liabilities at a particular Subject Property. Therefore, Langan cannot "insure" or "certify" that the Subject Property is free of environmental impacts. No expressed or implied representation or warranty is included or intended in this report, except that our services were performed, within the limits prescribed by our client, with the customary standard of care exercised by professionals performing similar services under similar circumstances within the same jurisdiction.

The conclusions, opinions, and recommendations provided in this report are based solely on the specific activities as required for the performance of ASTM E1527-13 and are intended exclusively for the purpose stated herein, at the specified Subject Property, as it existed at the time of our site visit.

2.0 SITE DESCRIPTION

2.1 Location and Description

The Subject Property (Block 2319, Lot 2) is comprised of an approximate 67,000-square-foot irregularly shaped lot and contains an approximate 20,000-square-foot one-story building (no basement); asphalt-, concrete-, and cobblestone-paved exterior driving/storage areas; an approximate 10,500-square-foot private parking lot, and sparsely-vegetated areas. The Subject

Property is bordered to the northwest and northeast by commercial properties, to the southeast by the Third Avenue Bridge, and to the southwest by the Harlem River. Site reconnaissance photographs are presented in Appendix A.

Based on visual observations of the surrounding area made during the site reconnaissance and a review of historical aerial photographs and maps, the Subject Property is located in an area primarily characterized by mixed commercial, residential, and industrial use.

According to the United States Geological Survey (USGS) Central Park Quadrangle 7.5-minute Series Topographic Maps, the Subject Property sits at an elevation of approximately 9 feet above mean sea level (msl). The topography in the immediate area of the Subject Property is generally flat. The approximate depth to groundwater is estimated at about 5 feet below grade surface (bgs). Groundwater is expected to flow to the southwest towards the Harlem River. The following table summarizes adjoining and surrounding property usage:

Direction	Adjoining Properties	Surrounding Properties
Northeast Southwest	Block 2319, Lots 112 & 109 (two five-story mixed residential/commercial buildings), followed by several multi-story mixed residential/commercial buildings and associated parking areas Block 2319, Lot 200 followed by the Harlem River and railroad tracks	The Harlem River borders the Subject Property to the southwest. Multiple-story residential, commercial, and industrial buildings occupy the
Southeast	Third Avenue Bridge	remaining surrounding
Northwest	Block 2319, Lot 55 (commercial moving and storage company)	properties.

2.2 Current Site Use and Improvements

The Subject Property is improved with an approximate 20,000-square-foot one-story building (no basement); asphalt-, concrete-, and cobblestone-paved exterior driving/storage areas; an approximate 10,500-square-foot fenced private parking lot; and sparsely-vegetated areas. Global Energy Efficiency, an energy management company located approximately 550 feet east of the Subject Property at 14 Bruckner Boulevard, operates the private parking lot at the southeast corner of the Subject Property. A shoring, scaffolding, and underpinning contractor (Richard C Mugler Co., Inc. [Mugler Inc.]), operates the remainder of the Subject Property. Mugler Inc. uses the Subject Property for equipment fabrication, storage, truck loading/unloading, and equipment repairs. Improvements are summarized in the following table:

SUBJECT PROPERTY IMPROVEMENTS			
Size of the Subject Property	67,000 square feet		
Buildings/Spaces/Structures	Improved with a 20,000-square-foot one-story building; asphalt-, concrete-, and cobblestone-paved exterior driving/storage areas; an approximate 10,500-square-foot fenced private parking lot; and sparsely-vegetated areas.		
Surface Water	Surface water is not located on the Subject Property. The nearest surface water body is the Harlem River located west of the Subject Property, across Block 2319, Lot 200.		
Potable Water Source	New York City		
Sanitary and Storm Sewer Utilities	New York City		
Electrical Utilities	Consolidated Edison Company of New York, Inc.		
Construction Completion Date	1931 (approximate)		
General Construction Type	Brick and concrete masonry with wood trusses.		
Heating System Type	A small gas-fired heater and a large wood burning stove.		
Emergency Power	None		

2.3 Title Records

Langan researched ownership records through the New York City Department of Finance, Office of the City Register, Automated City Register Information System (ACRIS) website at http://a836-acris.nyc.gov/CP/. ACRIS listed 2401 3rd Avenue, LLC as the current owner of the Subject Property. The following table summarizes the deed and other conveyance information for the Subject Property.

Date	Document Type	First Party	Second Party
3/30/2000	Deed	MUGLER, RICHARD C. JR.	2401 3RD AVENUE, LLC
12/30/1997	Lease	MUGLER, RICHARD C. JR.	KAI DEVELOPMENT CORP.

3.0 USER PROVIDED INFORMATION

3.1 User Questionnaire

Per ASTM E1527-13, a buyer and owner questionnaire was provided to inquire about specialized information related to the Subject Property. The buyer questionnaire indicated no knowledge of environmental conditions at the Subject Property. A copy of the completed buyer questionnaire is provided in Appendix B. The owner questionnaire indicated no knowledge of environmental conditions at the Subject Property. A copy of the completed buyer questionnaire is also provided in Appendix B.

3.2 Previous Environmental Reports

Previous environmental reports were not provided to Langan to review as part of this Phase I ESA.

4.0 RECORDS REVIEW

4.1 Environmental Records

A copy of regulatory database information was provided by EDR and is included in Appendix C. The EDR report is a listing of sites identified on select federal and state standard source environmental databases within the approximate search radius specified by ASTM Standard Practice for E1527-13. Langan reviewed each environmental database on a record-by-record basis to determine if certain sites identified in the report are suspected to represent a potential impact to the Subject Property. Langan also reviewed "Orphan Sites" listed within the report. Orphan Sites are those sites that could not be mapped due to inadequate address information. Orphan Sites that were identified by Langan within the ASTM search radii, either during the site reconnaissance or by cross-referencing to mapped listings, are addressed in the discussion below. All distances to adjacent properties are measured from the perimeter of the Subject Property.

The following table lists the number of sites by database within the prescribed search radius appearing in the EDR Report.

Database Record Summary			
Database Reviewed (Date of government version)	Minimum Search Area	Subject Property listed	Number of Sites Within Minimum Search Area
USEPA DA	TABASES		
National Priorities List (NPL) (10/25/2013)	1 Mile Radius	No	0
Delisted NPL (10/25/2013)	1/2 Mile Radius	No	0
Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) and CERCLIS No Further Remediation Action Planned (NFRAP) (10/25/2013)	1/2 Mile Radius	No	0
Resource Conservation and Recovery Act (RCRA) Corrective Reports (CORRACTS) (3/11/2014)	1 Mile Radius	No	0
RCRA Treatment, Storage, and Disposal Facilities (TSDF) (3/11/2014)	1/2 Mile Radius	No	0
RCRA Generators (3/11/2014)	Subject Property and Adjoining	No	0
Facility Index System/Facility Registry System (FINDS) Database (11/18/2013)	Subject Property	No	0

Database Record Summary				
Database Reviewed (Date of government version)	Minimum Search Area	Subject Property listed	Number of Sites Within Minimum Search Area	
Environmental Response Notification System (ERNS) (9/30/2013)	Subject Property	No	0	
Engineering Controls (EC) Subject Propertys Lists (12/17/2013)	Subject Property	No	0	
Institutional Controls (IC) Subject Propertys Lists (12/17/2013)	Subject Property	No	0	
	ATABASES			
Hazardous Waste Disposal Subject Propertys (SHWS) and Delisted SHWS (2/17/2014)	1 Mile Radius	Yes	5	
Hazardous Substance Waste Disposal Subject Property Inventory (HSWDS) (1/1/2003)	1/2 Mile Radius	No	0	
Solid Waste or Landfill Facilities (SWF/LF) (12/12/2013)	1/2 Mile Radius	No	4	
Leaking Tanks (LTANKS) (5/19/2013)	1/2 Mile Radius	No	50	
SPILLS Information Database (NY SPILLS) (5/19/2014)	1/8 Mile Radius	No	27	
EC Subject Propertys Lists (5/19/2014)	Subject Property	No	0	
IC Subject Propertys Lists (5/19/2014)	Subject Property	No	0	
Voluntary Cleanup Program (VCP) (5/19/2014)	1/2 Mile Radius	No	0	
Brownfields (5/19/2014)	1/2 Mile Radius	No	3	
Petroleum Bulk Storage Facilities (PBS) UST and Aboveground Storage Tanks (AST) Databases (3/31/2014)	Subject Property and Adjoining	No	0	
Chemical Bulk Storage (CBS) UST and AST Databases (3/31/2014)	Subject Property and Adjoining	No	0	
Major Oil Storage Facilities (MOSF) UST and AST Databases (1/1/2002)	Subject Property and Adjoining	No	0	
Registered and Historical Drycleaners (DRYCLEANERS) (4/17/2014)	1/4 Mile Radius (N/A)	No	0	
NY E Designation (6/18/2014)	1/8 Mile Radius	Yes	9	
EDR (PROPRIETARY) DATABASES				
EDR Former Manufactured Gas Plant (MGP) Sites (N/A)	1 Mile Radius (N/A)	No	1	

Database Record Summary			
Database Reviewed (Date of government version)	Minimum Search Area	Subject Property listed	Number of Sites Within Minimum Search Area
EDR US Hist Auto Stat (N/A)	1/4 Mile Radius (N/A)	No	16
EDR US Hist Cleaners (N/A)	1/4 Mile Radius (N/A)	No	1

N/A Not Applicable; databases with a "Not Applicable" Minimum Search Radius are databases reviewed as part of the Phase I ESA but not required as per ASTM E1527-13.

A description of the reviewed databases is provided in the EDR Report (Appendix D). A summary of Subject Property database listings and other sites identified within the prescribed search area is presented below:

4.1.1 Federal Agency Database Findings

The Subject Property and/or sites within their respective minimum search distances as specified by ASTM E1527-13 were not listed in the any of the federal agency databases.

4.1.2 State Agency Database Findings

The Subject Property and/or sites within their respective minimum search distances as specified by ASTM E1527-13 were not listed in the following state agency databases: HSWDS, EC, IC, VCP, PBS, CBS, MOSF, and DRYCLEANERS.

SHWS

The SHWS database maintains information regarding the investigation and cleanup of suspected hazardous waste sites. The Subject Property is listed in the SHWS database due to an attempted environmental investigation in April 2013. The listing states that the investigation could not be completed because the property owner would not allow access and that no environmental data was available for the Subject Property. The SHWS listing is not considered a REC.

The EDR report identified four additional SHWS sites identified within one mile of the Subject Property. Based on the nature of the listings and their distance from the Subject Property (more than 1,600 feet), the SHWS listings are not considered RECs.

SWF/LF Database

The SWF/LF database is a comprehensive listing of State permitted/recorded solid waste facilities. The Subject Property was not listed in the SWF/LF database; however, four SWF/LF listings were identified within ½-mile. Two of the four listings (Waste Management of NY (WMNY) LLC Harlem River Yard and Petro Recycling LLC) are located 550 feet and 880 feet east of the Subject Property, respectively. WMNY LLC Harlem River Yard (located at 98 Lincoln Avenue) is listed as an active transfer station of municipal solid waste and construction & demolition debris. Petro Recycling LLC (located at 290 East 132 Street) is listed as an active processing center for soil, concrete, rock, gravel, stone, and sand. The two remaining SWF/LF sites are located more than 1,000 feet from the Subject Property. Based on the nature of the listing, the four identified SWF/LF sites are not considered RECs.

Leaking Underground Storage Tanks Database

The LTANKS database contains an inventory of reported leaking storage tank incidents, including leaking USTs and ASTs. The Subject Property was not listed in the database; however, 50 LTANK incidents were identified within a 1/2-mile radius. The listed incidents have been primarily caused by tank test failures, tank failures, and tank overfills. Forty-five of the 50 LTANK incidents have been granted closed status by the NYSDEC. Based on the nature of the five open listings and their distance from Subject Property (more than 1,900 feet and/or located across the Harlem River), the listings are not considered RECs.

Spills Database

The NY Spills database is an inventory of sites where spills have been identified and reported to the NYSDEC. The Subject Property was not listed in the database; however, 27 NY Spill incidents were identified within a 1/8-mile radius of the Subject Property, of which 25 incidents have been granted closed status by the NYSDEC. One of the open listings is located more than 1,500 feet away and does not constitute a REC. The record for the remaining open NY Spill listing is described below.

Site Name: 2477 Third Avenue Property

Site Address: 2477 Third Avenue

Location: 660 feet northeast (up-gradient) of the Subject Property.

Classification: Open Spill & Active Brownfield Site

Description: Based on investigations conducted to date, the primary contaminants of concern in soil and groundwater are petroleum related compounds. No information was provided with respect to the off-site migration of contaminants; however, the EDR report indicates that the potential exists for off-site migration of site-related

contaminants in soil vapor. This Brownfield Site may have adversely impacted groundwater and/or soil vapor at the Subject Property and is considered a REC.

Brownfields Database

The Brownfields database is a listing of State and tribal Brownfields Sites registered with the NYSDEC. The minimum search radius for Brownfields facilities includes the Subject Property and sites within one half-mile of the Subject Property. The Subject Property was not listed in the database; however, three sites were identified within the search radius. Based on the nature of the listings and their distance from Subject Property (more than 1,400 feet), two of the three listings are not considered RECs. The record for the remaining Brownfields listing (2477 Third Avenue) is detailed above and is considered a REC.

NY E Designation Sites

The Subject Property has an "E" designation for air, noise, and hazardous materials as a result of the Port Morris/Bruckner Boulevard Rezoning (CEQR # 05DCP005X). In addition, nine properties within the 1/8 mile search radius were listed in the database. The "E" designation itself is not considered a REC; however, any development of the properties will be subject to environmental review by the New York City Office of Environmental Remediation (NYC OER) and sub-surface investigation will be required and approved by the NYC OER before building permits are issued and a remedial action work plan must be approved and implemented, to the satisfaction of the NYC OER, prior to obtaining a certificate of occupancy..

4.1.3 Other Database Findings

Manufactured Gas Plant (MGP) Sites

The MGP Sites database is a proprietary database that includes records of manufactured coal gas plants compiled by EDR. The Subject Property was not listed in the MGP database. One MGP Site was identified within a one-mile radius of the Subject Property; however, the identified site is located more than 4,800 feet cross-gradient from the Subject Property and is not considered a REC.

Historical Auto Stations

The Historical Auto Stations database is a proprietary database that includes records of historical auto stations compiled by EDR. The Subject Property was not listed in the historical auto stations database. Sixteen historical auto stations sites were identified within the minimum search criteria of 1/4 mile of the Subject Property, two of which were identified

within 300 feet of the Subject Property. Potential petroleum and/or solvent releases associated with the two Historical Auto Stations listings (listed below and shown on Figure 2) may have adversely impacted soil, groundwater, and/or soil vapor at the Subject Property and are considered a REC:

- Moca Auto Repair (2005-2007) / Diffuse Auto Repair (2008-2012) 225 East 134th Street
- George's Auto Repair (2011 & 2012) 2416 3rd Avenue

Historical Cleaners

The Historical Cleaners database is a proprietary database that includes records of historical cleaners compiled by EDR. The Subject Property was not listed in the historical cleaners database. One cleaner was identified within the minimum search criteria of ¼ mile from the Subject Property. Based on the nature of the listing (no reported violations) and its distance from the Subject Property (725 feet crossgradient), the presence of the historical cleaner is not considered a REC.

4.1.4 Local Regulatory Agency Findings

FOIA Requests

FOIA requests were submitted to the following federal, state, and local agencies via written correspondence:

- New York City Department of Environmental Protection (NYCDEP);
- New York City Department of Health (NYCDOH);
- New York City Fire Department (FDNY);
- New York State Department of Health (NYSDOH);
- New York State Department of Environmental Conservation (NYSDEC); and
- USEPA, Region 2.

FOIA requests were sent on July 18, 2014. The following table summarizes acknowledgement of receipts and responses.

Agency		Acknowledgement of Receipt Date	Response
	NYCDOH	July 23, 2014	As of the date of this report, responses have not been

		received.
NYCDEP	Not received	As of the date of this report, responses have not been received.
FDNY	Not received	As of the date of this report, responses have not been
IDINI	Not received	received.
NYSDOH	July 21, 2014	As of the date of this report, responses have not been
		received.
NYSDEC	Not received	As of the date of this report, responses have not been
		received.
USEPA Region 2	July 21, 2014	As of the date of this report, responses have not been
		received.

Should any future responses alter the conclusions provided within this report, we will issue modified conclusions as an addendum to this report. Copies of the FOIA requests are included in Appendix D.

New York City Department of Buildings (NYCDOB)

Langan conducted a records search through the NYCDOB online query system on July 28, 2014. The Subject Property has a Department of Finance Building classification of G2-Garage/Gas Station. According to the NYCDOB database, eight open violations are associated with the Subject Property; however, after further review, these violations are associated with the northeastern-adjoining property. Additional actions reported for the Subject Property (but may also be associated with the northeastern-adjoining property) included building notices, alterations, plumbing repair slips, and fire protection plans. Certificate of Occupancy documents were not available for the Subject Property. A copy of the NYCDOB findings are provided in Appendix F.

Zoning Department

According to the New York City Planning Commission Zoning Map 6a, the Subject Property is located in a M1-3/R8 mixed-use district, typically characterized by moderate commercial and residential use. The review of the zoning map did not reveal RECs associated with the Subject Property; however, the Subject Property is listed with a restrictive "e" designation. A copy of the zoning map is provided in Appendix G.

4.2 Physical Setting Sources

4.2.1 Topography

According to the United States Geological Survey (USGS) Central Park Quadrangle 7.5-minute Series Topographic Maps, the Subject Property sits at an elevation of approximately 9 feet

above mean sea level (msl). The topography in the immediate area of the Subject Property is generally flat. The approximate depth to groundwater is about 5 feet below grade surface (bgs). Groundwater is expected to flow to the southwest towards the Harlem River, which is located adjacent and to the southwest of the Subject Property.

4.2.2 Geology

The Subject Property is located in the Bronx, which is located near the southern end of the Manhattan Prong. The Manhattan Prong is one of two southwestward extensions of the New England Upland physiographic province of the Northern Appalachians. The underlying bedrock in this area generally consists of white calcite-dolomite marble (Inwood Marble) interlayered with Fordham Gneiss. Bedrock outcrops were not observed at the Subject Property. Based on USGS reports, bedrock beneath the Subject Property is presumed to be at a depth of approximately 50 feet bgs.

4.2.3 Hydrology

Groundwater flow is typically topographically influenced, as shallow groundwater tends to originate in areas of topographic highs and flows toward areas of topographic lows, such as rivers, stream valleys, ponds, and wetlands. A broader, interconnected hydrogeologic network often governs groundwater flow at depth or in the bedrock aquifer. Groundwater depth and flow direction are also subject to hydrogeologic and anthropogenic variables such as precipitation, evaporation, extent of vegetation cover, and coverage by impervious surfaces. Other factors influencing groundwater include depth to bedrock, the presence of artificial fill, and variability in local geology and groundwater sources or sinks.

The approximate depth to groundwater is estimated at 5 feet bgs. Groundwater at the Subject Property is expected to flow to the southwest towards the Harlem River, which is located adjacent and to the southwest of the Subject Property. Potable water is provided to the Subject Property by the City of New York and is derived from surface impoundments in the Croton, Catskill, and Delaware watersheds.

4.3 Historical Use Information

Langan reviewed available historic resources (including aerial photographs, Sanborn and topographic maps, and city directories) dated 1891 to 2011. Findings of the reviews are presented below.

4.3.1 Aerial Photographs

Langan reviewed aerial photographs of the Subject Property and surrounding areas for the years 1924, 1941, 1944, 1954, 1966, 1975, 1984, 1994, 1995, 2006, 2009, and 2011. Copies of aerial photographs are included in Appendix I. A summary of the aerial photograph review is presented in the following table.

AERIAL PHOTOGRAPH SUMMARY				
YEAR	COMMENTS			
1924	The Subject Property is occupied by a commercial building the stretches over the northeastern adjoining lots. The Mott Haven Canal occupies the area to the north and adjacent to the Subject Property and piers are shown along the southwester edge of the Subject Property. The surrounding areas are densely developed with a mix of commercial and residential structures. A bridge is located immediately southeast of the Subject Property.			
1941	The Mott Haven Canal has been partially filled and a small addition along the southern edge of the on-site building is now shown.			
1944	The Subject Property and surrounding area appear similar to 1941; however, piers are no longer shown to the southwest of the Subject Property.			
1954	The Subject Property and surrounding area appear similar to 1944.			
1966	The Mott Haven Canal has been completely filled in and the structure once connected to the Subject Property building to the northeast has been demolished. The area to the northeast is now occupied by a vacant lot.			
1975, 1983, 1994, 1995	The Subject Property and surrounding area appear similar to 1966; however, starting in 1994, a small section of building along the northeast corner of the Subject Property has been removed. Also starting in 1994, the structure on the Subject Property now resembles the size and configuration of the present-day structure.			
2006, 2009, 2011	The property to the northeast has been developed. The structures on the Subject Property and surrounding areas now resemble the size and configuration of the present-day structures.			

Langan's aerial photograph review revealed that the Subject Property was occupied by a structure that resembles the size and configuration of the present-day structure since at 1941. Langan's review of aerial photographs did not reveal RECs.

4.3.2 Sanborn Fire Insurance Maps

Langan reviewed Sanborn Maps for the years 1891, 1908, 1922, 1928, 1935, 1944, 1946, 1947, 1951, 1968, 1977, 1978, 1980, 1981, 1984, 1986, 1989, 1991-1996, 1998, and 2001-2007. Sanborn Maps constitute a database of prior site uses of real property for many cities and towns in the United States. Copies of the maps are provided in Appendix J. A summary of the Sanborn Maps is presented on the following table.

SANBORN MAP SUMMARY			
YEAR	COMMENTS		
1891	Subject Property: The Subject Property is developed as part of J.L. Mott Iron Works and is identified as containing a large one-story castings shop (present-day building), a two-story stable, and a one-story office. The exterior of the Subject Property is shown as being used for the storage of castings and molds. Surrounding Area: J.L. Mott Iron Works occupies the surrounding area to the northeast and is identified as containing a machine shop, pattern shop, offices, a foundry, and a brass shop. The Mott Haven Canal is shown to the north. To the southeast, across Third Avenue is a property identified as containing building materials (Bell & Son), sand, North and East River Steamboat Co. The Harlem Bridge is located southeast of Subject Property and the Harlem River lines the southwestern Subject Property boundary.		
1908	Subject Property: The Subject Property appears similar to 1891; however, the two-story stable and one-story office buildings are no longer shown. Surrounding Area: The areas surrounding the Subject Property appear similar; however, a portion of J.L. Mott Iron Works to the northeast is now labeled as vacant. Additionally, the property to the the southeast, across Third Avenue is now identified as Central Rail Road of New Jersey, Bronx Freight Terminal and a property to the east, across Third Avenue, is now identified as auto building.		
1922	Subject Property: The Subject Property appears similar to 1908; however, the Subject Property building is now labeled as Hydraulic Steel Company. Surrounding Area: The buildings to the northeast of the Subject Property are labeled as Hurlbury Motor Truck Company and Marks Bros Glass. The remainder of the surrounding area appears to have undergone relatively little change.		
1928	The 1928 Sanborn map shows less detail than the others do. The entire block between East 134 th Street and the Harlem River is labeled as a manufacturing establishment. The surrounding area appears to have undergone relatively little change.		
1935	Subject Property: The building on the Subject Property is now labeled as General Builders Supply Company Inc. and a label identifying the presence of a 1,550-gallon buried gasoline tank is shown along the southern exterior of the building. A small addition is shown along the northwestern edge of the building and railroad tracks are shown along the western and southern edges of the Subject Property. Surrounding Area: The buildings to the northeast of the Subject Property are labeled as offices, storage, Vestal Chemical Laboratories Inc., and lubricating oils storage. Further to the northeast are a coal yard and a six-story building identified as Allied Drug & Chemical Corp. The properties located to the east of the Subject Property, across Third Avenue, include the 3 rd Avenue Rail Road System Freight Yard, which contains a 275-gallon gasoline tank, and an auto house containing a 275-gallon buried gasoline tank. Following these properties to the northeast exist a printing room and a private garage with a gas tank. The remainder of the surrounding area appears to have undergone relatively little change.		
1944	The Subject Property and surrounding area appear similar to 1935 and have undergone relatively little change; however, Allied Drug & Chemical Corp. is no longer shown to the northeast of the Subject Property.		

SANBORN MAP SUMMARY				
YEAR	COMMENTS			
1946	The Subject Property and surrounding areas appear similar to 1935; however, surrounding property use to the northeast now includes a warehouse and a private garage the former auto house (located to the east across Third Avenue) is no longer depicted.			
1947	The Subject Property and surrounding areas appear similar to 1946; however, the 1,550-gallon buried gasoline tank is no longer shown on the Subject Property and the gasoline tank identified at the 3 rd Avenue Rail Road Freight Yard is not depicted and in its place is oil storage.			
1951	Subject Property: The Subject Property remains unchanged from the 1947 map. Surrounding Area: A paint manufacturer containing one 3,000-gallon and two 10,000-gallon oil tanks is now shown in the location of the former Allied Drug & Chemical Corp. The coal yard (also located northeast of the Subject Property) is now identified as Collen Fuel Co. and is shown to contain oil storage sheds.			
1968	Subject Property: The Subject Property has undergone relatively little change from the 1951 map; however, the Subject Property is now labeled as contractor's storage and the railroad tracks are no longer shown. Surrounding Area: The buildings formerly connected to the Subject Property to the northeast are no longer shown (including the former private garage). Additionally, The coal yard and paint manufacturer (containing one 3,000-gallon and two 10,000-gallon oil tanks) are no longer shown. The property located to the southeast, across Third Avenue, is now labeled as Gerosa Haulage Corp. and contains a storage yard, crane repair, paint shop, crane paint shop, blacksmith shop, garage repair shop, and an office.			
1977, 1978, 1980, 1981, 1984, 1986, 1989, 1991-1996, 1998, 2001, 2002, 2003	The Subject Property and surrounding area appears similar to 1968 and have undergone relatively little change; however, starting in 1995, two auto repair shops are identified to east of the Subject Property across Third Avenue.			
2004	The Subject Property and surrounding area appears similar to 2002 and have undergone relatively little change; however, a self-storage facility is now shown the northeast of the Subject Property.			
2005-2007	The Subject Property and surrounding area appear similar to 2004 and have undergone relatively little change.			

Langan's Sanborn Map review revealed that the Subject Property was developed prior to 1891 as part of J.L. Mott Iron Works. In 1922 through 1968, the Subject Property was identified as Hydraulic Steel Company, manufacturing establishment, General Builders Supply Company Inc., and contractor's storage. From 1935 through 1946, a 1,550-gallon buried gasoline tank is shown along the southern exterior of the Subject Property building. Starting in 1935, the Subject Property contains a building that resembles the size and configuration of the present-day building. Historical use of the Subject Property is a REC. Inadvertent releases of solvents, petroleum products, metals, polychlorinated biphenyls (PCB) and/or other chemicals used

during former and current operations may have adversely impacted soil, groundwater, building components and/or soil vapor at the Subject Property.

Properties surrounding the Subject Property have historically been residential dwellings and commercial buildings with auto repairs, office space, parking garages, storage buildings, manufacturing facilities, a coal yard, printing, and chemical laboratories. RECs associated with historical uses of adjoining and surrounding properties are identified on Figure 2 and include the following:

- A private garage (1946 1951) and lubricating oils storage (1935 unknown) located at 2415 Third Avenue
- "Vestal Chemical Laboratories" (1935 1947) located at 2413 Third Avenue;
- "Allied Drug & Chemical Corporation" (1935) and a paint manufacturer (1951) located at 220 East 134th Street;
- A coal yard (1935 1951) formerly located approximately 300 feet northeast of the Subject Property (no address available);
- An auto building (1908 1947) located at 2414 Third Avenue;
- An auto house (1935 1944) located at 3 Bruckner Boulevard;
- A railroad freight yard (1935 1944) located at 3-5 Bruckner Boulevard; and
- A private garage (1935 1944) and a printing facility (1935 1947) located at 3-5 Bruckner Boulevard.

4.3.3 Historical USGS Topographic Quadrangles

Langan reviewed historical USGS Topographic Quadrangles obtained from EDR for information regarding past uses of the Subject Property. Quadrangle maps were available for the Subject Property for the years 1897, 1947, 1956, 1966, 1979, and 1995. Based on a review of the historic topographic maps, the Subject Property and surrounding areas were developed with an urban grid by 1897. Review of the historical topographic quadrangles did not reveal RECs associated with the Subject Property. Copies of the topographic maps are provided in Appendix K.

4.3.4 City Directories

The City Directory Abstract, obtained from EDR, is a review of available business directories, including city, cross-reference, and telephone directories, at approximately five-year intervals for the years spanning 1927 through 2013. Copies of the City Directory Abstracts are provided in Appendix I. Review of the information available in the City Directory revealed RECs associated with the Subject Property, including; Mott J.L. Iron Works (1927), General Builders Supply Corporation (1949-1956), Brill Equipment Company (1949-1956), Mugler Richard Shoring Company, Inc. (1965-2013), US Gear Manufacturing Company (1965-1971), and Ohio Gasket Manufacturing Corporation (1971).

Review of information available in the City Directory revealed RECs associated with the surrounding property use, including; Allied Drug & Chemical Corporation (1927) and Vestal Inc. Chemical Specialists (1949) located at 2413 Third Avenue.

4.3.5 Environmental Lien Search

Langan contracted EDR to conduct an Environmental Lien search for the Subject Property. The results of the search, which included a compilation of available data and verification of the findings with the appropriate regulatory authorities, revealed that there are no Environmental Liens or other Activity and Use Limitations (AUL) associated with the Subject Property. A copy of the Environmental Lien Search is provided in Appendix M.

5.0 SITE RECONNAISSANCE

5.1 Methodology and Limiting Conditions

The site reconnaissance was conducted in a systematic manner focusing on the spatial extent of the Subject Property and then progressing to the adjacent and surrounding properties. The assessment of the adjacent and surrounding properties was limited to identifying, if possible, any indications of past or current use that may involve the use, storage, disposal, or generation of hazardous substances or petroleum products; noting the general type of current use; the general topography of the surrounding area; and providing a general description of adjoining or adjacent structures.

5.1.1 Date and Time of Inspections

The Subject Property reconnaissance was completed on July 10, 2014 at 2:00 PM by Ken Simmons, of Langan. Mr. Simmons was accompanied by Richard Mugler, the site owner. The weather at the time of the inspection was sunny and approximately 60° F.

5.1.2 General Site Setting and Reconnaissance Observations

The Subject Property is improved with an approximate 20,000-square-foot one-story building (no basement); asphalt-, concrete-, and cobblestone-paved exterior driving/storage areas; an approximate 10,500-square-foot fenced private parking lot; and sparsely-vegetated areas. Site reconnaissance photographs are presented in Appendix A. Global Energy Efficiency, an energy management company, located approximately 550 feet east of the Subject Property at 14 Bruckner Boulevard, operates the private parking lot at the southeast corner of the Subject Property. A shoring, scaffolding, and underpinning contractor (Richard C Mugler Co., Inc. [Mugler Inc.]), operates the remainder of the Subject Property. The building is connected to public water and sewers and is heated by a gas-fired boiler (no longer in use), a small gas-fired heater, and a large wood burning stove.

The interior of the building is constructed of concrete floors, painted concrete block walls, and a raised wooden ceiling. Mugler Inc. uses the Subject Property for equipment fabrication, storage, truck loading/unloading, and equipment repairs. As such, there are typical tools, maintenance/repair materials, and miscellaneous equipment used and stored throughout. Equipment and materials included steel beams, framing timbers, power tools, engine parts, paint storage, one operational and two decommissioned forklifts. Poor general housekeeping was apparent throughout the building. Discoloration and staining were apparent throughout the

interior of the building, suggesting incidental releases of petroleum products during truck maintenance, and the concrete slab was compromised in several areas. Because fractures in the slab provide a conduit for spilled motor oils and/or petroleum products to impact subsurface conditions, current use by Mugler, Inc. constitutes a REC.

The parking lot was occupied by several parked trucks and vehicles. According to Mr. Mugler, one 550-gallon gasoline UST, located outside the southeast corner of the building, was closed-in place circa 1999 (see Figure 2). An area of patched concrete and an apparent abandoned fill port further to the southeast of the building was identified and is suspected to be associated with another decommissioned UST. Based on the potential presence of historic tanks and lack of any documentation of tank closure, the historical USTs are a REC.

Pits, Ponds, Lagoons

Pits, ponds, and/or lagoons were not observed.

Pools of Liquid

With the exception of several small puddles of accumulated rainwater, no pools of liquid were observed.

Storm Drains, Wells, and Cisterns

Two exterior storm drains were observed along the southeastern corner of the building. No evidence of water wells or cisterns was observed. Four floor drains were identified within the building's interior.

Polychlorinated Biphenyl (PCB) Transformers and Suspect Equipment

Except for fluorescent lights, transformers or suspect PCB-containing equipment were not observed. Fluorescent light ballasts manufactured prior to 1979 may contain PCBs.

Storage Containers and Drums

The following storage containers and drums were identified:

- Two full 55-gallon drums of waste oil;
- Four partially full 55-drums of new oil;
- 15 small containers (ranging from 1 to 3 gallons) of gasoline inside a locked cage;
- Three compressed gas cylinders of acetylene;
- Two compressed gas cylinders of oxygen; and

• Three 55-gallons drums of kerosene.

No signs of leaks or spills were observed in the immediate vicinity of the drum storage areas. However, discoloration and staining were apparent throughout the interior of the building, suggesting incidental releases of petroleum products, and the concrete slab was compromised in several areas. Because fractures in the slab provide a conduit for spilled motor oils and/or petroleum products to impact subsurface conditions, current use by Mugler, Inc. constitutes a REC

Air Emissions or Wastewater Discharges

Evidence of air or wastewater discharges were not observed.

Sumps

No sumps were observed at the Subject Property.

USTs or ASTs

According to Mr. Mugler, one 550-gallon gasoline UST, located outside the southeast corner of the building, was closed-in place circa 1999 (see Figure 2). An area of patched concrete and an apparent abandoned fill port further to the southeast of the building was identified and is suspected to be associated with another decommissioned UST. Based on the potential presence of historic tanks and lack of any documentation of tank closure, the historical USTs are a REC.

Monitoring Wells or Remedial Activities

Monitoring wells were not observed at the Subject Property.

Stained or Discolored Soils

Stained or discolored soil was not observed at the Subject Property.

Leachate or Seeps

Leachate or seeps were not observed.

Adjoining and Surrounding Property Uses

The following table summarizes adjoining and surrounding property usage:

Direction	Adjoining Properties	Surrounding Properties
Northeast Southwest	Block 2319, Lots 112 & 109 (two five-story mixed residential/commercial buildings), followed by several multi-story mixed residential/commercial buildings and associated parking areas Block 2319, Lot 200 followed by the Harlem River	The Harlem River borders the Subject Property to the southwest. Multiple-story residential, commercial, and industrial buildings occupy the remaining surrounding
Southeast	and railroad tracks Third Avenue Bridge	
Northwest	Block 2319, Lot 55 (commercial moving and storage company)	properties.

Site Reconnaissance Conclusions

Based on observations during the site reconnaissance, the following RECs were identified:

- Reportedly, a 550-gallon gasoline UST was closed-in place circa 1999 along the southeastern exterior of the building.
- Langan observed an area of patched concrete and an apparent abandoned fill port further to the southeast of the building, which could be associated with another UST.
- Discoloration and staining were apparent throughout the interior of the building, suggesting incidental releases of petroleum products during truck maintenance, and the concrete slab was compromised in several areas.

6.0 INTERVIEWS

6.1 Subject Property Owner/Occupant

Mr. Simmons interviewed Mr. Mugler, the Subject Property owner, during the site reconnaissance on July 10, 2014. Mr. Mugler indicated that his company operated at the Subject Property since approximately 1958, was knowledgeable of the UST closure activities, and was unaware of any spills or releases that may have occurred at the Subject Property, or any other environmental concerns at the Subject Property.

6.2 Owners/Tenants of Adjacent Properties

Owners/tenants of adjacent properties were not interviewed as part of this Phase I ESA.

7.0 ADDITIONAL SERVICES

7.1 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.

The USEPA's "Map of Radon Zones for New York State" indicates that Bronx is located in a Zone 3 radon risk area, which is associated with a low radon risk potential. Zone 3 risk areas are those where the predicted average indoor screening level is less than 2.0 picocuries per liter (pCi/L). According to the New York State Department of Health (NYSDOH), a total of 31 radon tests have been conducted in Bronx County with results indicating that 4% of living areas and 58% of basements have radon concentrations above 4 pCi/L. Based on this data, there is a potential for radon to accumulate in buildings; radon represents an environmental concern. A USEPA radon map is provided as Appendix N.

7.2 Asbestos-Containing Material, Lead-Based Paint, and PCBs

A formal survey to identify asbestos containing materials (ACM), lead-based paint (LBP), and PCBs in building materials was not conducted as part of this Phase I ESA. Based on the age of the building, ACM, LBP, and PCB-containing materials are likely present in the Subject Property building materials. Chipping paint was observed on some of the walls, and suspect PCB-containing materials (i.e., window caulking and fluorescent light ballasts) were observed throughout the building.

8.0 DEVIATIONS AND DATA GAPS

8.1 Deviations

Langan has performed a Phase I ESA of the Subject Property utilizing a standard of good commercial and customary practice that is consistent with the ASTM E1527-13 and the 40 Code of Federal Regulations (CFR) Part 312 Standards and Practices for AAI. Significant deviations were not made to the above referenced standards.

8.2 Data Gaps

In order to address data gaps, additional sources of information may be consulted. According to AAI, Section 312.20 (g), "to the extent there are data gaps (as defined in section 312.10) in the information developed...that affect the ability of persons (including the environmental professional) conducting the all appropriate inquiries to identify conditions indicative of releases or threatened releases...such persons should identify such data gaps, identify the sources of information consulted to address such data gaps, and comment upon the significance of such data gaps". According to ASTM E 1527-13, Section 8.3.2.3, "historical research is complete when either: (1) the objectives in 8.3.1 through 8.3.2.2 are achieved; or (2) data failure is encountered. Data failure occurs when all standard historical sources that are reasonably ascertainable and likely to be useful have been reviewed and yet the objectives have not been met. If data failure is encountered, the report shall document the failure and, if any of the standard historical sources were excluded, give the reasons for the exclusion."

This Phase I ESA was completed without significant data gaps.

9.0 FINDINGS AND OPINIONS

This Phase I ESA was conducted in accordance with the ASTM Practice E1527-13 (Standard Practice for ESA: Phase I ESA Process) and the USEPA AAI Rule. The objective of this Phase I ESA was to identify the presence or likely presence, use, or release on the Subject Property of hazardous substances or petroleum products as defined in ASTM E1527-13 as a REC.

The Phase I ESA identified the following RECs for the Subject Property:

REC 1 – Current and Historical Manufacturing and Industrial Use

The Subject Property was historically used for manufacturing purposes since at least 1891. Historical operators include; J.L. Mott Iron Works (1891-1922), Hydraulic Steel Company (1922-1935), General Builders Supply Corporation (1935-1968), Brill Equipment Company (1949-1956), US Gear Manufacturing Company (1965-1971), Ohio Gasket Manufacturing Corporation (1971), Mugler Richard Shoring Company, Inc. (Mugler Inc.) (1965-present). Inadvertent releases of solvents, petroleum products, metals, polychlorinated biphenyls (PCB) and/or other chemicals used during manufacturing operations may have adversely impacted soil, groundwater, building components and/or soil vapor. The Subject Property is presently operated by Mugler, Inc. for shoring equipment fabrication, storage, truck loading/unloading, and equipment repairs. As such, there are typical tools, maintenance/repair materials, and miscellaneous equipment used and stored throughout. Discoloration and staining were apparent throughout the interior of the building, suggesting incidental releases of petroleum products during truck maintenance, and the concrete slab was compromised in several areas. Because fractures in the slab provide a conduit for spilled motor oils and/or petroleum products to impact subsurface conditions, current use by Mugler, Inc. constitutes a REC.

REC 2 - On-Site Petroleum Bulk Storage

The following historical underground storage tanks (USTs) were identified:

- One 550-gallon gasoline UST, located outside the southeast corner of the building, was reportedly closed-in place circa 1999 (see Figure 2).
- An area of patched concrete and an apparent abandoned fill port southeast of the building, which is suspected to be associated with another decommissioned UST, was identified during the site reconnaissance.
- One 1,550-gallone gasoline UST was identified on the 1935 through 1946 Sanborn maps.

Based on the known and suspected presence of historic tanks and lack of any documentation of tank closure, the historical USTs are a REC.

REC 3 – Current Historical Use of Surrounding Properties

Current and historical use of properties surrounding the Subject Property include a private garage (1946-1951), lubricating oils storage (1935-1983), two chemical corporations (1935-1947), a paint manufacturer (1951), a coal yard (1935-1951), an auto building (1908-1947), an auto house (1935-1944), a private garage (1935-1944), a printing facility (1935-1947), and several auto repair shops (2005-2012). In addition, an active New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) site was identified approximately 660 feet northeast (up-gradient) of the Subject Property. Based on investigations conducted to date, the primary contaminants of concern in soil and groundwater are petroleum related compounds. No information was provided with respect to the off-site migration of contaminants; however, the Environmental Database Report (EDR) report indicates that the potential exists for off-site Property migration of site-related contaminants in soil vapor. Potential petroleum and solvent releases associated with the historical surrounding property uses may have adversely impacted groundwater and/or soil vapor at the Subject Property and is considered a REC.

Historic RECs (HRECs), Controlled RECs (CRECs) or de minimis conditions were not identified.

Non-ASTM Matters

Asbestos, Lead, and Polychlorinated Biphenyls

A formal survey to identify asbestos containing materials (ACM), lead-based paint (LBP), and polychlorinated biphenyls (PCBs) in building materials was not conducted as part of this Phase I ESA. Based on the age of the building, ACM, LBP, and PCB-containing materials are likely present.

Radon

According to the New York State Department of Health (NYSDOH), a total of 31 radon tests have been conducted in Bronx County with results indicating that 4% of living areas and 58% of basements have radon concentrations above 4 picocuries per liter (pCi/L). Based on this data, there is a potential for radon to accumulate in buildings; radon represents an environmental concern.

10.0 REFERENCES

The following references were reviewed as part of this Phase I ESA:

- 1. Environmental Data Resources, Inc., Inquiry Number: 4002757.12, July 14, 2014. Aerial Photo Decade Package.
- 2. Environmental Data Resources, Inc., Inquiry Number: 4002757.5, July 14, 2014. City Directory Abstract.
- 3. Environmental Data Resources, Inc., Inquiry Number: 4002757.7, July 15, 2014, 2014. Environmental Lien Search.
- 4. Environmental Data Resources, Inc., Inquiry Number: 4002757.4, July 11, 2014, 2014. Historical Topographic Map Report.
- 5. Environmental Data Resources, Inc., Inquiry Number: 4002757.2s, July 11, 2014, 2014. Radius Map with GeoCheck.
- 6. Environmental Data Resources, Inc., Inquiry Number: 4002757.3, July 14, 2014, 2014. Sanborn Map Report.
- 7. Environmental Protection Agency, <u>USEPA Map of Radon Zones.</u>
- 8. New York City Department of Buildings, Building Information System, http://www.nyc.gov/html/dob/html/bis/bis.shtml, reviewed July 28, 2014.
- 9. New York City Planning Commission. November 14, 2013. Zoning Map 6a.
- 10. New York City Department of Finance, Office of the City Register, Automated City Register Information System (ACRIS) website, http://a836-acris.nyc.gov/CP/, reviewed July 28, 2014.
- 11. NYC Oasis Maps: http://www.oasisnyc.com/map.aspx
- 12. NYCityMap, http://gis.nyc.gov/doitt/nycitymap/
- 13. "Sanitary & Topographic Map of the City and Island of New York", Viele, 1865.

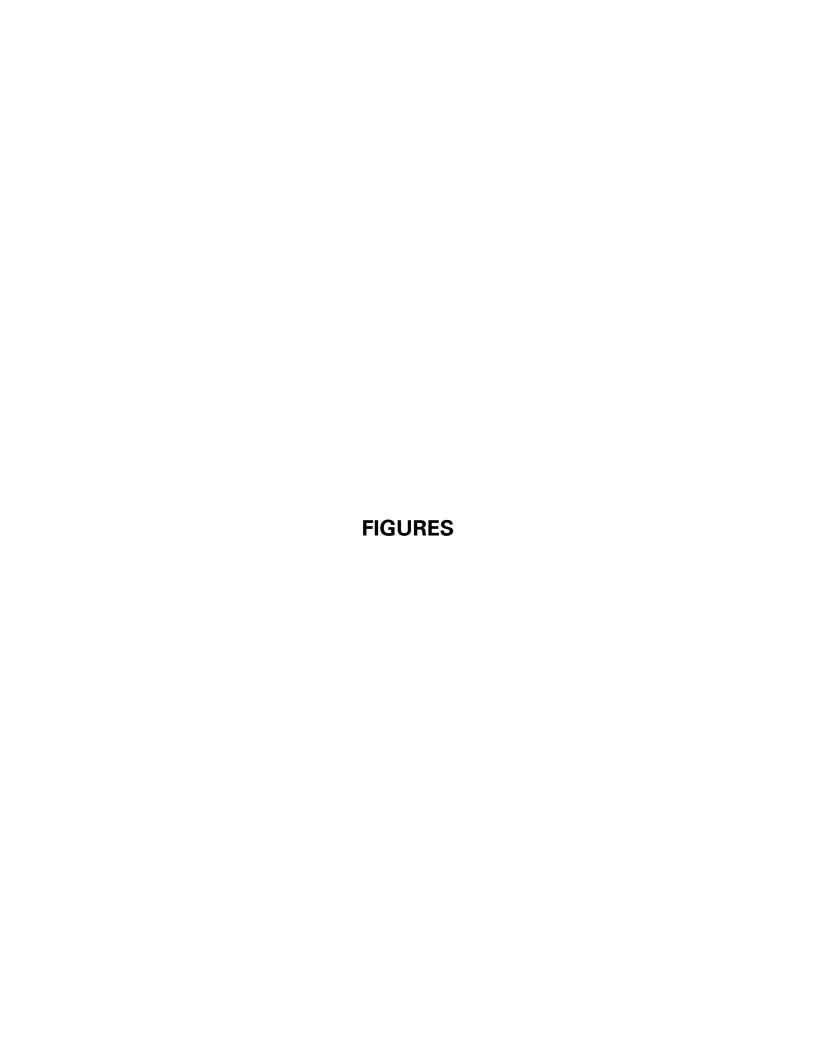
- 14. "Map of the City and County of New York with the Adjacent Country by David H. Burr, Published by Simeon DeWitt, Surveyor General, Pursuant to an Act of the Legislature. Second Edition", Burr, 1832.
- 15. "Map of the City and County of New York with the Adjacent Country by David H. Burr, Published by Simeon DeWitt, Surveyor General, Pursuant to an Act of the Legislature. Third Edition", Burr, 1840.
- 16. "Bedrock and Engineering Geologic Maps of Bronx County and Parts of New York and Queens Counties, New York", USGS, 1994.

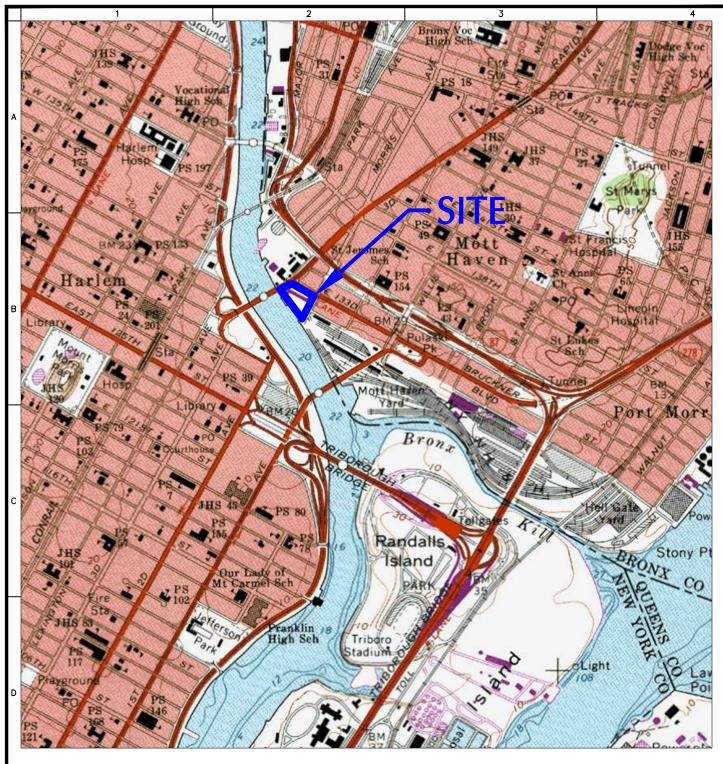
11.0 STATEMENT OF QUALIFICATIONS AND SIGNATURES

Langan declares that, to the best of its professional knowledge and belief, the personnel who performed this Phase I ESA meet the definition of Environmental Professional as defined in Subsection 312 10 of 40 CFR 312 and that they have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject Property. They have developed and performed the AAIs in conformance with the standards and practices set forth in 40 CFR Part 312. Resumes outlining the qualifications of the Environmental Professionals who performed this Phase I ESA are provided in Appendix P.

Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.

Michael D. Burke, CHMM Senior Associate





SOURCE: PORTION OF USGS CENTRAL PARK QUANDRANGLE MAP, 1995

WARNING: IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.

LANGAN

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Collectively known as Langan

101 LINCOLN AVENUE

BLOCK No. 2316, LOT No. 1 BRONX

NEW YORK NEW YORK

Drawing Title

SITE LOCATION MAP

	Project No 1703	01301	Drawing No.		
	Dote APRIL	x, 2014	1		
	Scale NTS		ı		
	Drawn By RJW	Checked By MB			
	Submission APRIL	Date X, 2014			
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