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## EXECUTIVE SUMMARY

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At the request of the City of New York (the City), the Parsons Brinckerhoff (PB) Team conducted a Phase I Environmental Site Assessment (ESA) of the property located at 400 11<sup>th</sup> Avenue, New York, New York (Block 706, Lot 1 – hereafter referred to as the “Subject Property”). The purpose of this ESA is to identify, to the extent feasible, the presence or likely presence of hazardous substances or petroleum products on or near the Subject Property.

These hazardous substances and petroleum products are defined in the American Society of Testing and Materials (ASTM) Standard Practice E 1527-00 as *recognized environmental conditions (RECs)*. In addition, other environmental issues and conditions not considered to be RECs are identified in this assessment. These include *historical RECs* or *de minimis* conditions.

The Phase I ESA includes a review of regulatory agency databases and historical maps; as well as visual observations of the Subject Property and adjoining properties.

The City has requested that this assessment be conducted for purposes of environmental due diligence in order to qualify for the innocent landowner defense to CERCLA liability. In addition, the assessment is intended to identify conditions that have the potential to impact the use of the Subject Property as the location of a subway station entrance for the No. 7 Subway Extension as part of the Hudson Yards Rezoning and Development Program.

The Subject Property is located at the northeast corner of the intersection of 34<sup>th</sup> Street and 11<sup>th</sup> Avenue, in an area that is primarily characterized by commercial and residential use. Review of Historic Sanborn Fire Insurance Maps identified RECs associated with the historical uses of the Subject Property and adjoining properties. The RECs at the Subject Property include: an unknown type of factory; a blacksmith; a welding facility; a garage with gasoline tanks and a motor freight station. At adjoining properties the RECs included: factories; a foundry; machine shops; a garage with gasoline underground storage tanks (USTs); a motor freight station and the Federal Express facility with fuel oil and gasoline tanks.

Review of regulatory agency databases identified four facilities with active New York Spills/Leaking Underground Storage Tanks (NY Spills/LTANKS) cases that are considered RECs. Two of the four spills have the same address as facilities listed in the Resource Conservation and Recovery Information System Generators/Transporters (RCRIS Gen/Trans) database.

Access to the Subject Property was not permitted; therefore, the property was assessed from the sidewalk only. This modified site inspection revealed evidence of two, 2,900-gallon capacity tanks containing unleaded gasoline. Active fill ports and vent pipes were not identified; however, on the southern facade of the building were two signs each indicating a tank as described above. In addition to these signs were four metal rings observed in the sidewalk; they appear have been concreted over and could be indicative of former fill port locations. Because access to the Subject Property was not permitted, whether the tanks are USTs or ASTs could not be determined from the modified site

visit. Since the database review did not reveal any registration or closure information for tanks of this capacity, this finding is considered a REC as it appears as though the tanks are not in compliance with the appropriate NYSDEC regulations; which require proper registration and closure documentation.

Based on a previous Phase I ESA performed by the PB Team, the building or area 300 feet upgradient of the Subject Property is considered a REC. The facility at this location (527 West 34<sup>th</sup> Street) reportedly removed a leaking UST and closure documentation does not appear to be available. It cannot be determined if this tank was closed in accordance with the applicable NYSDEC regulations; the size, contents, presence and general house keeping practices of the tank(s) cannot be observed or identified. If there are subsurface impacts at this location due to the former UST, it is possible that the subsurface of the Subject Property could be impacted based on its proximity and downgradient location from the 527 West 34<sup>th</sup> Street facility.

Correspondence from the United States Environmental Protection Agency (USEPA) indicated that a property located mid-block (527 West 34<sup>th</sup> Street) is a small-quantity generator facility permitted under the federal Resource Conservation and Recovery Act. No violations or releases associated with this facility have been reported.

Based on the findings of this Phase I ESA, it does not appear that the RECs identified would preclude use of the Subject Property as the location of a subway station entrance; however, the PB Team recommends that a program of subsurface sampling and laboratory analysis be undertaken to determine if releases associated with the historical land uses, apparent unregistered gasoline tanks at the Subject Property, reported leaking UST(s) on an upgradient property and four open NY Spills/LTANKS cases, have impacted soil and/or groundwater at the Subject Property, specifically in areas where construction activities are proposed.

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## 1.0 INTRODUCTION

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This report presents the findings of a Phase I Environmental Site Assessment (ESA) conducted by the Parsons Brinckerhoff (PB) Team for the property located at 400 11th Avenue (Block 706, Lot 01), in the Borough of Manhattan, New York (Subject Property). The City of New York (the City) is considering the purchase of the Subject Property for use as a subway station entrance for the No. 7 Subway Extension as part of the Hudson Yards Rezoning and Development Program.

The purpose of this ESA is to identify, to the extent feasible, the presence or likely presence of hazardous substances or petroleum products on or near the property. This report has been prepared for the City and conforms to the American Society for Testing and Materials (ASTM) *Standard Practice for Phase I Environmental Site Assessments* (E 1527-00), in accordance with the “due diligence” regulations of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and in accordance with Section 9601 (35)(b) of the Superfund Amendments and Reauthorization Act (SARA), which requires that “all appropriate inquiry” be made into the presence or potential presence of hazardous substances or petroleum products on site.

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## 2.0 SITE CONDITIONS

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### 2.1 Site Description

The Subject Property is located at 400 11<sup>th</sup> Avenue, New York, New York. It is identified as Block 706, Lot 01 in the City's tax records. A map showing the location of the Subject Property is presented in Figure 1. A site plan is presented in Figure 2.

The Subject Property consists of an approximately 55,000-square-foot area located at the northeast corner of the intersection of 34<sup>th</sup> Street and 11<sup>th</sup> Avenue. It is currently a two-story warehouse-type building apparently occupied by Verizon.

#### 2.1.1 Topography

According to our review of the United States Geological Survey (USGS) 7.5-Minute Quadrangle Map, *Weehawken, NJ - NY*, dated 1981, the elevation of the Subject Property is approximately 25 feet above mean sea level (MSL). The Subject Property was observed to be on a gently sloping plain, with a slight gradient to the west. A copy of the topographic map is presented in Figure 1.

#### 2.1.2 Geology

The Subject Property is underlain by the Manhattan Prong of the New England Uplands physiographic province. The bedrock of the Manhattan Prong underlies much of southwestern Connecticut, Westchester County, New York, and New York City, and ends at the southern tip of Manhattan Island. Three distinct metamorphic rock formations make up the Manhattan Prong; known collectively as the New York City Group. These formations are: the highly folded and contorted Fordham gneiss, the oldest and most widespread of the formations; the Inwood marble, derived from dolomitic limestone; and the younger Manhattan Formation, consisting largely of mica schist, overlying the Inwood marble and making up most of the rock outcrops on Manhattan Island. The soils are mostly acidic, shallow to deep, and rocky (Baskerville 1989).

Surficial geology in the vicinity of the Subject Property is expected to consist of Pleistocene deposits that contain till and stratified drift, overlain by Holocene deposits. The till, which was deposited as ground moraine, is less than 25 feet thick in most places and is discontinuous, while Holocene deposits consist of salt marsh deposits, alluvium, and shoreline or beach deposits. These sediments consist of sand, gravel, silt, organic silt, peat, loam, and shells. Artificial fill overlies most Holocene deposits and contains various mixtures of soil (Baskerville 1989).

Geotechnical information collected from soil borings advanced in the vicinity of the Subject Property indicates that bedrock is found at a depth of approximately 50 feet below grade (ft-bg) and consists of gray mica schist.

### 2.1.3 Soils

Subject Property soils are characterized as *Laguardia/Ebbets* soils, which are characterized as follows: *Laguardia/Ebbets* soils are very deep, well drained, formed on human created or modified landscapes, in thick (>40 inches) human transported materials mixed with construction debris. Coarse fragment (>2mm) content, including natural rocks and human artifacts, that average 35 to 75% by volume. Most of the artifacts (concrete, asphalt, brick, coal ash, etc.) will act like rock fragments. Permeability is moderate in areas where the soil has not been compacted at the surface, and moderately slow where the surface has been compacted or contains platy structure(s) (United States Department of Agriculture, September 2003).

### 2.1.4 Hydrology

Manhattan island is underlain by pre-Cambrian metamorphic rocks which have been tightly folded and subsequently eroded. In most places, these pre-Cambrian rocks are overlain by a thin covering of Pleistocene deposits, consisting chiefly of till. The rock beneath most of the island is the Manhattan schist. Manhattan schist contains some joints, irregular fractures and faults along which groundwater moves, but in some places chemical weathering has filled these openings with clay. The Manhattan schist underlies more than three-fourths of Manhattan, but it is not considered to be an important source of groundwater since openings in the bedrock that yield water through joints and fractures are minimal (Perlmutter and Arnow 1953).

Due to the thinness and low permeability of the Pleistocene till, water yields are low. However, there are two large bodies of stratified drift in Manhattan that contain and yield considerable groundwater. Neither of these bodies, which are associated with the prominent depressions in the bedrock surface, is located in close proximity to the Subject Property. One is located in northern Manhattan (extending from 96<sup>th</sup> Street and the East River to about 145<sup>th</sup> Street and the Hudson River), while the other is located in southern Manhattan (all of the island south of 14<sup>th</sup> Street) (Perlmutter and Arnow 1953).

Based on a review of existing information, groundwater beneath the Subject Property is expected to flow to the west; ultimately discharging into the Hudson River located approximately 1,100 feet west of the Subject Property. Surface drainage, based on identified topography, flows west from the Subject Property. Estimated groundwater levels and/or flow direction(s) may vary due to seasonal fluctuations in precipitation, local usage demands, geology, underground structures, or dewatering operations. Stormwater runoff from the Subject Property is expected to drain into stormwater drains.

Based on a review of the 1975 New York State Department of Environmental Conservation (NYSDEC) Freshwater Wetlands Map, New York County, Map 2 of 4, no wetlands that are regulated under the Freshwater Wetlands Act are present in the Borough of Manhattan. A review of National Wetlands Inventory (NWI) information present in the EDR Radius Map Report (EDR 2003) indicated that no wetlands are present on or adjacent to the Subject Property.

The PB Team reviewed the Federal Emergency Management Agency's digital Q3 flood data for the Subject Property. The Q3 data indicated that the Subject Property is located outside of the 100-year and 500-year flood boundaries. A copy of the Q3 map is included in Figure 3.

Digital Q3 flood data are developed by scanning the existing Flood Insurance Rate Map (FIRM) hardcopy, vectorizing a thematic overlay of flood risks. Vector Q3 flood data files contain only certain features from the existing FIRM hardcopy and are contained in one single countywide file, including all incorporated and unincorporated areas of a county.

Digital Q3 flood data are designed to support planning activities, some Community Rating System activities, insurance marketing, and mortgage portfolio reviews. The file does not provide base flood elevation information; thus, it has limited application for engineering analysis, particularly for site design. The product is a valuable tool however in screening property addresses within a Geographic Information System to determine flood risks.

### 2.1.5 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.

The New York State Department of Health (NYSDOH) maintains a database of radon test results on a local and county level. According to the NYSDOH, area radon information reviewed indicated that the Subject Property is in an area classified as Tier 3 (Low Potential) where the average indoor concentration of radon is less than 2 picocuries per liter (pCi/L), which is less than United States Environmental Protection Agency (USEPA) Action Level of 4 pCi/L. As such, The PB Team concludes that it is unlikely that elevated levels of radon gas are present at the Subject Property.

### 2.1.6 Adjoining Properties

The general area of the Subject Property consists of commercial and residential use. The following table summarizes property uses adjacent to the Subject Property:

Direction	Facility Name/Description	Address and/or Location	Current Use
East	Six-story building and a four-story building	539 West 35 <sup>th</sup> Street and 550 West 35 <sup>th</sup> Street	Six-story luxury apartment and office building; four-story building with commercial use on the first floor and floors two through four appear to be vacant
West	Jacob Javits Convention Center	Across Eleventh Avenue	Convention Center
North	Open Sitting Area	Across 35 <sup>th</sup> Street	Public Open Space
South	Copacabana Nightclub	Across 34 <sup>th</sup> Street	A nightclub



### 3.0 HISTORICAL RESEARCH

The information obtained from historical use research is a preliminary means of assessing the potential for hazardous material contamination present at the Subject Property. Historical fire insurance maps were reviewed as part of this effort.

#### 3.1 Fire Insurance Maps

Sanborn Maps identify historical land uses at the Subject Property and adjacent areas, as well as potential areas of environmental concern. They typically document land use, structural changes, street addresses, occupants, gas storage areas, raw material pilings, and types of products manufactured and/or stored on site. The PB Team reviewed Sanborn Maps for the Subject Property and surrounding area in order to identify historical land uses that may have involved hazardous substances and petroleum products. Sanborn Map coverage included the years 1890, 1899, 1911, 1930, 1950, 1979 and 1996. Copies of the Sanborn Maps and a complete description of Sanborn Map coverage for these years are provided in Appendix A.

The review of the Sanborn Maps indicated that, in 1890 and 1911, the Subject Property was divided into numerous lots; the southern portion was comprised of lots that were either part of an unknown type of factory or a butcher shop. In 1930, the Subject Property is partly used as a garage with buried gasoline tanks indicated; also on the property are a blacksmith and a welding facility and noted as being below the property is Easterly Line of New York Rail Lines. In 1979, the property is identified as a motor freight station and in 1996 as a N.Y. Telephone Co. Garage. West of the Subject Property, across 11<sup>th</sup> Avenue, was identified as a rail yard from approximately 1890 to 1979; in 1996 the area is identified as the Jacob Javits Convention Center. The land use of the area surrounding the Subject Property to the north, east and south has included factories, machine shops, a blacksmith and welding facility, motor freight stations, U.S. Post Office and a Federal Express Facility.

The review of the Sanborn Maps identified the Subject Property and the surrounding area as RECs; they are summarized below.

Year	Description/Property Use	Distance/Direction	Assumed Hydraulic Gradient
1890	Unknown type of factory	Subject Property	Subject Property
	Factory, Machine Shop and Rail yard	Across 34th Street (South) and Across 11th Avenue (West)	Crossgradient and Downgradient
1899	Paper Factory	Adjacent to the East	Upgradient
	Foundry	Across 35th Street (North)	Crossgradient
1930	Two, 550-gallon Gasoline Tanks Buried, Blacksmith and Welding Facility	Subject Property	Subject Property
	Iron Works	Adjacent to the East	Upgradient
	Multiple Factories, Garage with one, 550-gallon Gasoline Tank Buried	Across 34th Street (South)	Crossgradient

1950	Garage with one, 550-gallon Gasoline Tank Buried	Across 34th Street (South)	Crossgradient
1979	Motor Freight Station	Subject Property	Subject Property
	Factory, Used Auto Parts Facility, US Post Office with Gasoline Tanks USTs? ASTs, Motor Freight Station	Adjacent to the North	Crossgradient
	US Post Office with two 30,000-gallon gas tanks USTs? ASTs?and one 20,000-gallon fuel oil storage tank	Across 35th Street (North), Across 34th Street (South)	Crossgradient
1996	Federal Express with two 30,000-gallon gas tanks and one 20,000-gallon fuel oil storage tank USTs? ASTs?and Motor Freight Station.	Across 34th Street (South)	Crossgradient

## 4.0 REVIEW OF PUBLIC RECORDS

The databases discussed in this section, provided by Environmental Data Resources (EDR) of Southport, Connecticut, were reviewed for information regarding documented and/or suspected releases of regulated hazardous substances and/or petroleum products on or near the Subject Property. Berger 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 Subject Property 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. Listings from the unmappable summary which were identified by Berger as a result of the area reconnaissance and/or cross-referencing to mapped listings are included in the corresponding database discussion within this section. A copy of the federal and state regulatory agency database is presented in Appendix C.

### 4.1 Federal and State Regulatory Agency Database Reviews

A summary of sites identified through the federal and state regulatory agency databases review is provided below:

Federal and State List	Subject Property Appears on List	Search Radius*	No. of Sites within Search Radius	Last Updated
National Priorities List for Federal Superfund Cleanup (NPL)	No	1 Mile	0	6/02/03
Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS)	No	1/2 Mile	0	8/01/03
Resource Conservation and Recovery Information System – Treatment, Storage or Disposal Facilities (RCRIS-TSD)/RCRIS Corrective Action Activity (CORRACTS)	No	½ Mile/ 1 Mile	0	5/08/03
Resource Conservation and Recovery Information System – Generators/Transporters (RCRIS Gen/Trans)	Yes	¼ Mile	20	8/18/03
State Inactive Hazardous Waste Sites (SHWS)	No	1 Mile	0	11/12/03
Solid Waste/Landfills Facilities Sites (SWF/LF)	No	½ Mile	1	8/20/03
New York State Spills Information (NY Spills)/Leaking Underground Storage Tanks (LTANKS)	Yes	1/8 Mile/ ½ Mile	39	3/22/02
Petroleum Bulk Storage Tanks/Chemical Bulk Storage Tanks (USTs/ASTs)	Yes	¼ Mile/ ½ Mile	27	3/22/02
Voluntary Cleanup Act	No	½ Mile	0	7/18/03
Registered Waste Tire Storage and Facility List	No	½ Mile	0	3/04/03
Registered Recycling Facility	No	½ Mile	0	6/09/03
Federal Toxic Release Inventory System (TRIS)	No	Subject Property	0	6/27/03

Emergency Response Notification System (ERNS)	No	Subject Property	0	2/03/03
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- \* The surrounding area search radius indicates the radial area (measured from the Subject Property) for which the database reviews was performed.

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

### **National Priorities List (NPL) –Superfund**

The USEPA NPL (or Superfund List) is a federal listing of uncontrolled or abandoned hazardous waste sites. The list is created from the CERCLIS database (see below) and is primarily based upon a score that each site or facility receives from the USEPA's Hazard Ranking System. After a site or facility has been identified as a CERCLIS site, the USEPA conducts an assessment of the property. The ranking score associated with the degree of contamination found is one of the determinations made as to whether the site is placed on the NPL. These sites are then prioritized for possible long-term remedial action and referred to the state for further action under state programs. The database search indicated that there are no NPL sites within one mile of the Subject Property.

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

The CERCLIS list is a compilation of records from a nationwide database created to maintain and regulate those facilities or sites that the USEPA has investigated or will investigate for suspected or uncontrolled releases of hazardous substances, contaminants or pollutants as reported by states, municipalities, private companies and private citizens under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or the Superfund Program). Once a site is placed on the CERCLIS list, it may be subjected to several additional levels of evaluation to determine the severity of the contamination. These levels of evaluation range from discovery and preliminary assessment to site inspection, and possibly to the Hazard Ranking System. Such a determination could ultimately place the site under consideration for inclusion on the NPL. Inclusion on the CERCLIS list does not confirm the presence of an environmental problem or a public health threat. Former CERCLIS sites that have been granted the status of No Further Remedial Action Planned (NFRAP) are also included in this database. Neither the Subject Property nor other facilities within a one-half mile radius are listed in the CERCLIS or NFRAP databases.

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

The Resource Conservation and Recovery Act (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 Subject Property nor other facilities

within a one-half-mile radius are listed in the RCRIS-TSD database or within a one-mile radius in the RCRIS CORRACTS database.

**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. Inclusion on the RCRIS database is not necessarily indicative of contamination; rather, it indicates only the presence of potential sources of contamination.

Twenty RCRIS (Gen/Trans) facilities were identified within a quarter-mile radius. An occupant of the Subject Property, New York Telephone at 555 West 34<sup>th</sup> Street, is listed as a RCRA (Gen/Trans). No RCRA violations were reported at this facility; therefore it is not considered a REC. Of the 19 other listed facilities, 14 are considered either cross or downgradient relative to the Subject Property and are not considered RECs. The remaining five facilities have open spills associated with their address, two of which are considered RECs based on their proximity to the Subject Property and active spill status. Locations of the facilities are 538 West 34<sup>th</sup> Street and 436 10<sup>th</sup> Avenue; which are discussed further in the NY Spills/LTANKS Section. The remaining three facilities with open spills associated with their address are not considered RECs due to their distance from the Subject Property and/or their downgradient location. The National Die & Button Mould Corporation, located at 541 West 34<sup>th</sup> Street, received a “generator-all requirements (oversight)” type of violation on May 10, 1985 and achieved compliance on November 13, 1985. Since this facility is currently in compliance, and there have been no reported releases, it is not considered a REC.

**State Inactive Hazardous Waste 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 Subject Property nor other facilities within a one-mile radius are listed in the SHWS database.

**Solid Waste/Landfill Facilities (SWF/LF)**

The SW/LF database is a comprehensive listing of State-permitted/recorded solid waste facilities. One LF facility was identified within a one-half mile radius of the Subject Property. Red Ball Interior Demolition, located at 625 West 29<sup>th</sup> Street, is/was considered a regulated transfer station. According to the database review, this facility is not active and is therefore not considered a REC.

**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 Subject Property. The database identified 41 NY Spills/LTANKS cases within a one-half mile radius of the Subject Property; 19 were closed cases and 13 were cross-gradient or downgradient of the Subject Property and are not considered RECs. The remaining nine open cases are either upgradient or in close proximity to the Subject Property and are summarized in the table below. The Subject Property was listed on the NY Spills/LTANKS database, with three separate spills associated with the NYNEX facility at 555 West 34<sup>th</sup> Street. However, all three

spills cases have been closed to the satisfaction of the NYSDEC. See Table 2 for a list of all open NY Spills/LTANK cases.

Listing	Distance/ Direction	Assumed Hydraulic Gradient	Status/Available Data
432 10 <sup>th</sup> Avenue	750 feet / East	Upgradient	Spill Case No. 102142724. Gasoline was found seeping into basement of 440 10 <sup>th</sup> Avenue; an unknown amount of gasoline spilled.
436 10 <sup>th</sup> Avenue, (AMOCO)*	750 feet / East	Upgradient	Spill Case No. 101658469. Failed tank inspections revealed less than 1 gallon of unknown petroleum spillage.
538 West 34 <sup>th</sup> Street *	Southeast / (across 34 <sup>th</sup> Street)	Crossgradi ent	Spill Case No. 104275572. Contaminated soil was discovered as tank was to be closed-in-place. An unknown amount of gasoline was spilled.
534 West 34 <sup>th</sup> Street	Southeast / (across 34 <sup>th</sup> Street)	Crossgradi ent	Spill Case No 104495773. Unknown amount of unknown petroleum spilled.
466 10 <sup>th</sup> Ave / Gaseteria 466 10 <sup>th</sup> Avenue*	1/8 -mile / Northeast	Upgradient	Spill Case No. 8909614. Less than 1 gallon of gasoline entered the building's sewer system. Local agencies reported to scene and monitoring wells were installed.
Gaseteria 466 10 <sup>th</sup> Avenue*	1/8 - to 1/4 - mile / Northeast	Upgradient	Spill Case No. 9606785. Reported gasoline fumes; no actual spillage of gasoline.
Port Authority NY/NJ – Manhole West 39 <sup>th</sup> Street/9 <sup>th</sup> Ave.	1/2 -mile / East	Upgradient to Crossgradi ent	Spill Case No. 8911942. 200 gallons of No. 2 Fuel Oil unaccounted for; total amount of spill undetermined.
Manhole 43220 West 36 <sup>th</sup> Street/10 <sup>th</sup> Avenue	1/8 -mile / Northeast	Upgradient	Spill Case No. 0011630. One gallon of dielectric fluid leaked from an open-ended cable; a sample was collected and no water ways or sewers were affected.
Four B Realty/AD Scheumann Lumber 524 West 36 <sup>th</sup> Street*	1/8 - to 1/4 - mile / Northeast	Upgradient to Crossgradi ent	Spill Case Nos. 9510491 and 9610133. Gasoline spills believed to be due to either overfills of underground tanks at different periods or possible tank leakage.

Based on the distances, assumed hydraulic gradients, and current regulatory status, the first four cases listed above are considered RECs because they have the potential to have affected soil and/or groundwater at the Subject Property. The remaining facilities listed are not considered RECs. Although upgradient of the Subject Property, these cases do not indicate releases that have the potential to impact the Subject Property based on their distances and/or the significance of the reported spill. As indicated by the asterisks in the above table, three facilities or addresses also appear on the RCRIS (Gen/Trans) list.

**Petroleum/Chemical Bulk Storage Tanks (USTs/ASTs)**

NYSDEC regulates underground storage tanks (USTs) and aboveground storage tanks (ASTs) according to their contents and capacity, as described below.

- **Petroleum Bulk Storage (PBS) Report:** This report is a comprehensive listing of all reported facilities that have petroleum storage capacities in excess of 1,100 gallons and less than 400,000 gallons.
- **Chemical Bulk Storage (CBS) Report:** This report contains information pertaining to facilities that store hazardous substances in ASTs with capacities of 185 gallons or more and USTs of any size.
- **Major Oil Storage Facilities (MOSF) Report:** This report contains summary information on facilities with petroleum storage capacities in excess of 400,000 gallons.

The PBS and CBS databases were researched to identify listings within a quarter-mile radius of the Subject Property and identified 27 PBS facilities and no CBS facilities. No MOSF facilities were identified within a half-mile of the Subject Property. One PBS tank facility was identified at the Subject Property and two others in the vicinity of the Subject Property; they are described below.

Listing	Distance/ Direction	Assumed Hydraulic Gradient	Status/Available Data
NYNEX 555 West 34 <sup>th</sup> Street	Subject Property	Subject Property	PBS No. 2-344745. Five USTs: Two 4,000-gallon removed, and three 550-gallon closed in place. Three, active, 275-gallon ASTs containing used oil listed for site. Contents are unknown for all five tanks.
Downing Management Corporation	300 Feet East	Upgradient	PBS No. 2-482307. Administratively closed (reasons include business is closed and/or mail is undeliverable, and staff cannot check if tanks were removed; or a duplicate registration was generated.) One, 5,000-gallon, AST containing #1, 2, or 4 fuel oil. PBS No. 2-601412. One, active, 5,000-gallon AST containing either #5 or 6 fuel oil.
Federal Express Corporation 538 West 34 <sup>th</sup> Street*	South / Across 34 <sup>th</sup> Street	Crossgradient	PBS No. 2-600488. Two, 10,000-gallon, closed-in-place USTs that contained unleaded gasoline.

As indicated by the asterisk in the above table, there is an open spill case associated with 538 West 34<sup>th</sup> Street; the area is considered a REC. The remaining two facilities or addresses do not have open spill cases associated with their address.

**Voluntary Cleanup (VCP)**

The State Voluntary Cleanup (VCP) Agreements database or Brownfields is a state database that identifies privately funded contaminated sites that are remediated to levels

allowing for the site's productive use. There were no VCP facilities identified within a one-half mile radius of the Subject Property.

**Registered Waste Tire Storage and Facility List (SWTIRE)**

The Registered Waste Tire Storage and Facility List (SWTIRE) is a state database that identifies registered waste and tire storage facilities. No facilities were identified within a one-half mile radius of the Subject Property.

**Registered Recycling Facility List (SWRCY)**

The Registered Recycling Facility List (SWRCY) is a state database that identifies registered recycling facilities. No facilities were identified within a one-half mile radius of the Subject Property.

**Federal Toxic Chemical Release Inventory System (TRIS)**

The Toxic Chemical Release Inventory System (TRIS) is a federal database that identifies toxic chemical release sites located on the Subject Property. The Subject Property was not identified on the TRIS.

**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 Subject Property is not listed on the ERNS database.

#### **4.2 Agency Correspondence**

A review of federal, state, and local records for the Subject Property was accomplished by contacting offices of various regulatory agencies. The results of the review of local records are presented below. Copies of the correspondences are included in Appendix C.

**United States Department of Environmental Protection (USEPA)**

USEPA information concerning the Subject Property was requested in a letter dated September 9, 2003. A response has not yet been received from the USEPA.

**New York State Department of Environmental Conservation (NYSDEC)**

NYSDEC information concerning the Subject Property was requested in a letter dated September 18, 2003. A response has not yet been received from NYSDEC.

**Fire Department of the City of New York (FDNY)**

FDNY is responsible for the enforcement of local fire codes pertaining to the use and storage of flammable and hazardous materials. FDNY information concerning USTs, sealed or removed underground storage tanks, and history of leaks at the Subject Property was requested in a record search form dated September 18, 2003. FDNY did not have any information regarding the Subject Property as documented in their letter dated September 18, 2003.



**New York City Department of Health (NYCDOH)**

The NYCDOH, Office of Environmental Investigations (OEI) maintains files of health-related environmental incidents in the City of New York. These incidents may include spills of hazardous chemicals, citizens' complaints regarding asbestos issues, or reports of chemical odors or fumes. NYCDOH information concerning the Subject Property was requested in a formal letter dated September 9, 2003. The OEI responded in a letter dated September 29, 2003 that the agency had no record of investigations regarding the Subject Property.

**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 citizens' complaints on environmental issues. NYCDEP information concerning the Subject Property was requested in a formal letter dated September 9, 2003. The agency responded in a letter dated October 14, 2003 that they had no asbestos records regarding the Subject Property. In a letter dated October 19, 2003 the NYCDEP's Department of Air, Noise, Permitting, Enforcement and Policy responded that they did not have any records regarding the Subject Property.

## 5.0 SITE INSPECTION

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Access to the Subject Property was not permitted; therefore, the property was assessed from the sidewalk. The sidewalk and building were inspected for fill ports, vent pipes and staining associated with such objects.

The Subject Property is a two-story building apparently occupied by Verizon. The site inspection revealed evidence of two, 2,900-gallon capacity tanks containing unleaded gasoline. Whether the tanks are USTs or ASTs could not be determined. Active fill ports and vent pipes were not identified; however, on the southern facade of the building were two signs each indicating a tank as described above. In addition to these signs were four metal rings observed in the sidewalk; they appear to have been concreted over and could be indicative of former fill port locations. No staining was observed around any of the rings.

Since the database review did not reveal any registration or closure information for tanks of this capacity, this finding is considered a REC. It appears as though the tanks are not in compliance with the appropriate NYSDEC regulations.

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## **6.0 INTERVIEWS**

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Interviews with site personnel were not available to the PB Team.

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## 7.0 FINDINGS

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The PB Team has performed a Phase I ESA of the property located at 400 11th Avenue in the Borough of Manhattan, New York. The ESA conforms to the ASTM *Standard Practice for Phase I Environmental Site Assessments* (E 1527-00). The Phase I ESA included a review of the site history, and a regulatory database search.

### 7.1 On-Site Conditions

The review of the Sanborn Maps indicated that, in 1890 and 1911, the Subject Property was divided into numerous lots; the southern portion was comprised of lots that were either part of an unknown type of factory or a butcher shop. In 1930, the Subject Property was partly used as a garage and buried gasoline tanks were indicated; also on the property were a blacksmith and a welding facility. Noted as below the property was Easterly Line of New York Rail Lines. In 1979, the property was identified as a motor freight station and, in 1996, as a N.Y. Telephone Co. Garage. The historical uses of the Subject Property as an unknown type of factory, a garage with buried tanks, a motor freight station, blacksmith and a welding factory have been identified as RECs.

During the modified site inspection, evidence of two, 2,900-gallon capacity tanks containing unleaded gasoline was identified. Whether the tanks are USTs or ASTs could not be determined. Active fill ports and vent pipes were not identified; however, on the southern facade of the building were two signs each stating the presence of a 2,900-gallon tank. In addition to these signs were four metal rings observed in the sidewalk; they appear to have been concreted over and could be indicative of former fill port locations. Since the database review did not reveal any registration or closure information for tanks of this capacity, this finding is considered a REC. It appears as though the tanks are not in compliance with the appropriate NYSDEC regulations.

### 7.2 Off-Site Conditions

The historical uses of several properties located in the vicinity of the Subject Property are considered RECs:

- 1890: A factory and machine shop across 34<sup>th</sup> Street (south of the Subject Property);
- 1899: A paper imaging factory adjacent to the east and a foundry across 35<sup>th</sup> Street (to the north of the Subject Property);
- 1930: Iron works adjacent to the east and factories and a garage with 550-gallon, buried gasoline tanks across 35<sup>th</sup> Street buried;
- 1979: Factory and a used auto parts facility across 35<sup>th</sup> Street, U.S. Post Office with buried gasoline tanks indicated and a motor freight station across 34<sup>th</sup> Street.
- 1996: Federal Express Facility with one, 20,000-gallon fuel oil tank, two, 30,000-gallon gasoline tanks and a motor freight station across 34<sup>th</sup> Street.

The four open NY Spills/LTANKS locations in the vicinity of the Subject Property considered RECs are as follows:

- 538 West 34<sup>th</sup> Street
- 534 West 34<sup>th</sup> Street
- 432 10<sup>th</sup> Avenue

- 436 10<sup>th</sup> Avenue (AMOCO)

According to the data available, each of these locations has had unknown amounts of gasoline or other petroleum products released. Based on the absence of adequate remediation data or definitive boundaries of possible contamination, these spill locations are considered RECs.

The facility located at 538 West 34<sup>th</sup> Street was also identified as a PBS facility and a RCRIS (Gen/Trans). The facility located at 436 10<sup>th</sup> Avenue shares the same address as that of a facility on the RCRIS (Gen/Trans) database.

An additional REC was identified during a Phase I ESA for 527 West 34<sup>th</sup> Street. According to the building's superintendent, the fill port observed in the sidewalk is no longer in use and the UST it supplied has been removed. Documentation regarding this tank removal was not available for review. The presence of the sidewalk fill port is considered a REC since the UST was reportedly removed; this suggests the tank was not removed in compliance with NYSDEC regulations.

## 8.0 CONCLUSIONS AND RECOMMENDATIONS

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The PB Team performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-00 and the requirements of the City. The assessment identified several RECs in the vicinity of the Subject Property including four open NY Spills/TANKS cases, historical land uses, two unregistered gasoline tanks, and the reported removed of a leaking UST on a property approximately 300 feet upgradient of the Subject Property. Two of the four open NY Spills/TANKS cases in the vicinity of the Subject Property also appear on the RCRIS (Gen/Trans) database. Historical use of the Subject Property and adjacent properties as factories, a foundry, machine shops, facilities with buried gasoline tanks and motor freight stations may have resulted in incidental releases of petroleum and/or metals and are therefore considered RECs due to potential subsurface impacts. The area of the two, suspected, 2,900-gallon capacity tanks containing unleaded gasoline revealed during the modified site inspection are considered a REC since the database review did not reveal any registration or closure information for tanks of this capacity. It appears as though the tanks are not in compliance with the appropriate NYSDEC regulations. The reported removal of a leaking UST at a property 300 feet upgradient to the Subject Property is considered a REC because the reported leaking tank apparently was removed without complying with NYSDEC regulations as proper registration and/or closure documentation does not appear to exist. Additionally, closure documentation was not provided; therefore the environmental integrity of the subsurface material is unknown. Furthermore, although this tank was reportedly leaking, the property's address did not appear on the NY Spills/LTANKS database.

Based on the findings of this Phase I ESA, it does not appear that the RECs identified would preclude use of the Subject Property as the location of a subway station entrance; however, the PB Team recommends that a program of subsurface sampling and laboratory analysis be undertaken to determine if releases associated with the historical land uses, assumed unregistered gasoline tanks at the Subject Property, reported leaking UST(s) on an upgradient property and four open NY Spills/LTANKS cases, have impacted soil and/or groundwater at the Subject Property, specifically in areas where construction activities are proposed.

## 9.0 LIMITATIONS

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### PHASE I ESA FOR 400 11th Avenue— NEW YORK, NY

This investigation was limited to the review of available records and a modified site inspection. The site inspection was limited to observation from the sidewalk as access on to the site was not permitted. Such an inspection cannot be expected to reveal all hazardous materials or situations that might be present on site; some hazardous materials or conditions may exist and not be detected because they are beyond the scope of this study. The investigation was conducted in a manner consistent with the level of care and skill exercised by environmental professionals currently practicing under similar conditions and was based on information made available to the representatives of the PB Team. All documents prepared by, or furnished by, the PB Team pursuant to this project are to be used in the context of the scope of services contracted. This document is not intended, or represented, to be suitable for reuse by the client or others on modifications of the project scope. Reuse or release to third parties without the expressed written permission of the consultant is prohibited.

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DATE:

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## 10.0 REFERENCES

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### **Resources Consulted:**

- American Society for Testing and Materials (ASTM) 1997, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, ASTM Designation E 1527-00.
- Baskerville, C.A., *Geology and Engineering Geology of the New York Metropolitan Area*, 1989.
- EDR, Radius Map Report, *Area/Corridor Study Subway Extension, New York, NY, 10001*. August 22, 2003.
- EDR, *Sanborn Fire Insurance Maps*. 1890, 1899, 1911, 1930, 1979 and 1996.
- Federal Emergency Management Agency, *Q3 Digital Flood Data, New York County, New York*. March 12, 2003.
- Perlmutter, N. and Arnow, T. *Ground Water in Bronx, New York and Richmond Counties with Summary Data on Kings and Queens Counties, New York City, New York*. 1953.
- United States Department of the Interior, U.S. Geological Survey, Topographic Map, 7.5 Minute Series, *Weehawken, NJ – NY*, 1995.

### **Regulatory Agencies Contacted:**

- Fire Department of the City of New York, September 9, 2003.
- New York City Department of Buildings, *Building Information System*, <http://webapps.nyc.gov:8082/bisweb/bsqpm01.jsp>, September 18, 2003.
- New York City Department of Environmental Protection, September 9, 2003.
- New York City Department of Finance, September 9, 2003.
- New York City Department of Health, September 9, 2003.
- New York State Department of Environmental Conservation, September 9, 2003.
- United States Environmental Protection Agency, September 9, 2003.



**Table 1**

**RCRIS Generators/Transporters  
Within One Quarter-Mile of the Subject Property**

<b>Facility Name</b>	<b>Facility Address</b>
Four B Realty	524 West 36 <sup>th</sup> Street
EOR Sixty-Eight of NY	506-510 West 36 <sup>th</sup> Street

**Table 2**

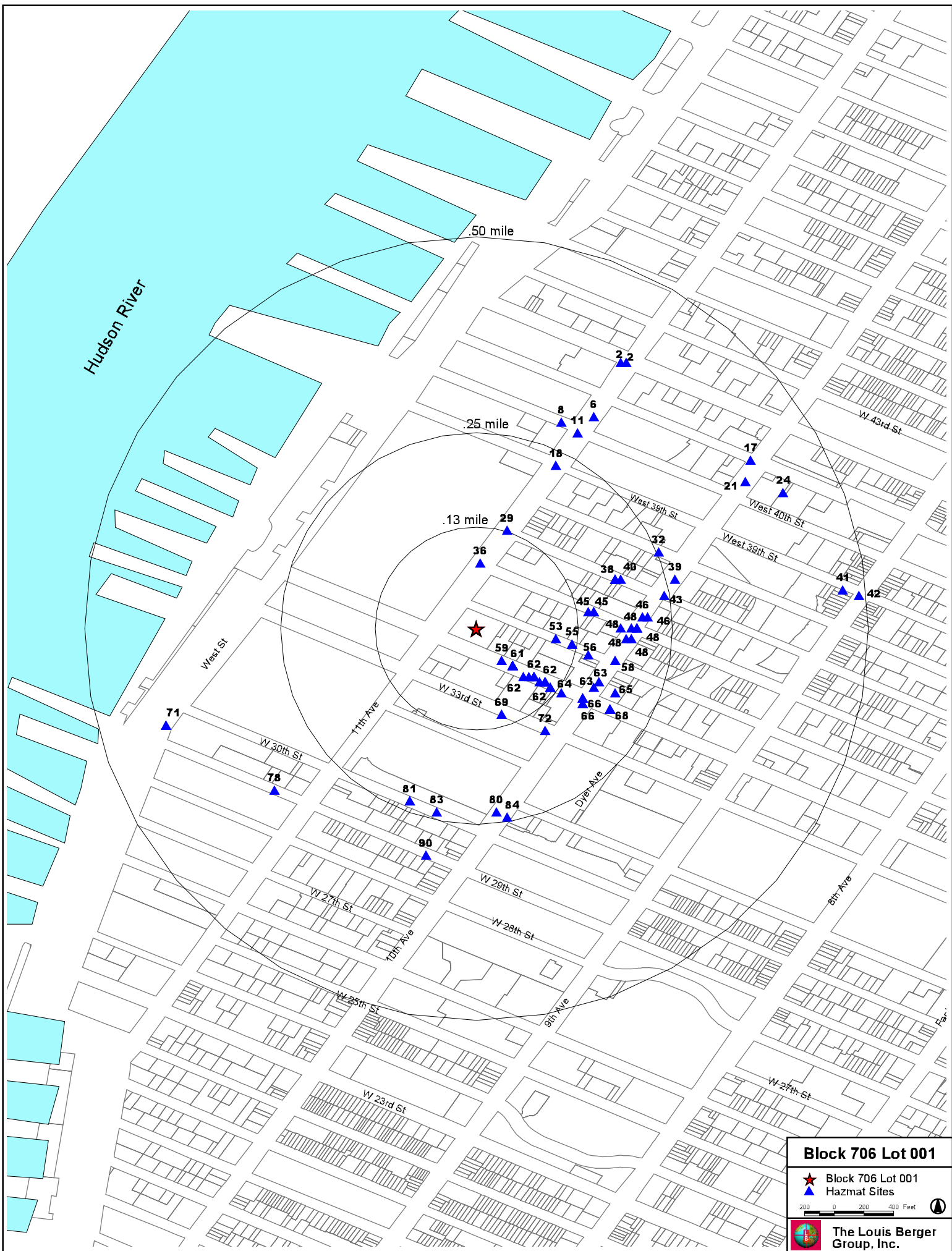
**Open NY Spills/LTANKS Cases  
Within one Half-Mile of the Subject Property**

<b>Facility Name</b>	<b>Facility Address</b>
A. B. Scheumann Lumber/Four B Realty	524 West 36 <sup>th</sup> Street
550 West 37 <sup>th</sup> Street	550 West 37 <sup>th</sup> Street
NYNEX Manhole No. N30	West 35 <sup>th</sup> Street & Tenth Avenue
Eleventh Avenue & 36 <sup>th</sup> Street	Eleventh Avenue & 36 <sup>th</sup> Street
Federal Express Manhole No. 43220	538 West 33 <sup>rd</sup> Street
538 West 34 <sup>th</sup> Street	West 36 <sup>th</sup> Street & Tenth Avenue
Hertz/Penske Box 1897	538 West 34 <sup>th</sup> Street
522 West 38 <sup>th</sup> Street	493 Tenth Avenue
Gaseteria	523 Eleventh Avenue
Amoco Station	522 West 38 <sup>th</sup> Street
438 Tenth Avenue	466 Tenth Avenue
Gaseteria	432 Tenth Avenue
456 Eleventh Avenue	438 Tenth Avenue
Vault No. 5204	480 Tenth Avenue
Former Greyhound Bus Depot SB 07384	456 Eleventh Avenue
524 West 29 <sup>th</sup> Street	-
550 West 30 <sup>th</sup> Street	523 Eleventh Avenue
Hunter College	-
Fast Towing & Auto Repair	524 West 29 <sup>th</sup> Street
Verizon	550 West 30 <sup>th</sup> Street
West 39 <sup>th</sup> Street & Ninth Avenue	450 West 41 <sup>st</sup> Street
505-509 West 41 <sup>st</sup> Street	547 Tenth Avenue
	605 West 42 <sup>nd</sup> Street
	West 39 <sup>th</sup> Street & Ninth Avenue
	505-509 West 41 <sup>st</sup> Street

**SANBORN FIRE INSURANCE MAP REVIEW  
BLOCK 706 LOT 01**

Year	Comments
1890	<b>Subject Property:</b> The southern half is comprised of many lots; all of which appear to be used as either an <i>unknown type of factory</i> or a butcher shop. The northern portion also is comprised of many lots; most with a structure on the lot but the number of stories is not legible.
	<b>Surrounding Properties:</b> Adjacent to the east is a lumber yard and a small lot indicated for commercial use. Across 11th Avenue appears to be a <i>railyard</i> ; across 34th Street is a <i>factory and a machine shop</i> ; and across 35th Street are stables.
1899	<b>Subject Property:</b> The southern half appears to be used for commercial purposes but detailed information is not legible and the northern portion appears unchaned from the 1890 map.
	<b>Surrounding Properties:</b> Adjacent to the east is now a <i>paper imaging factory</i> and a small lot with a dwelling indicated. Across 11th Avenue and also across 34th Street both appear to be unchanged from the 1890 map and across 35th Street is possibly a <i>foundry</i> (the map is not entirely legible).
1911	<b>Subject Property:</b> Map is not entirely legible but it appears that the southern portion is used for commercial purposes and the northern portion seems to be used for a mix of residential and commercial uses.
	<b>Surrounding Properties:</b> Adjacent to the east appears to be used as an industrial or commercial facility as the map is not entirely legible. Across 34th Street is a fluor warehouse and a kindling wood factory as well as stores and dwellings and across 35th Street is appears to be used for commercial and residential use. Across 11th Avenue is still a railyard in addition to Manhattan Market, which indicates numerous storage areas.
1930	<b>Subject Property:</b> Is partly a garage with two, <i>550-gallon gasoline tanks buried</i> , partly an electrical supplies warehouse and partly a storage and/or a general warehouse. Also present on the property is a <i>blacksmith and welding facility</i> and a laundry facility. Indicated as running underneath the Subject Property is Easterly Line of New York Rail Line.
	<b>Surrounding Properties:</b> Adjacent to the east is a small lot used as an <i>iron works</i> and a factory. Dwellings are also indicated throughout the property. Across 34th Street is half used for storage and the northern half is not legible. Across 35th Street is partially used for warehouses, <i>factories and a garage with one, 550-gallon buried gasoline tank</i> . (Some portions of this area are not legible.) Across 11th Avenue is Manhattan Market including numerous warehouses.
1950	<b>Subject Property:</b> The western potion of the property appears vacant and the eastern portion is partially occuppied by the garage as was the case in the 1930 map and appears to indicate the same <i>tanks</i> . Indicated as running underneath the Subject Property is Easterly Line of New York Rail Line.
	<b>Surrounding Properties:</b> Adjacent to the east is is not legible. Across 35th Street appears mostly vacant except for the southwest portion, which is occupied but it cannot be determined what type of facility occupies the property. Across 34th Street is not legible and across 11th Avenue is still identified as Manhattan Markets but the warehouses are no longer shown.
1968	<b>Subject Property:</b> No Sanborn Map available.
	<b>Surrounding Properties:</b> No Sanborn Map available.
1979	<b>Subject Property:</b> The entire property is identified as a <i>motor freight station</i> . Indicated as running underneath the Subject Property is New York Central Railroad.
	<b>Surrounding Properties:</b> Adjacent to the east appears to be used for commercial use. Across 35th Street appears mostly vacant except for the southwest portion, which is occupied by a <i>factory</i> and in the southeastern portion a <i>used auto parts place</i> is indicated. Across 34th Street is partly the US Post Office Garage facility with <i>gasoline tanks</i> indicated and the remainder is a <i>motor freight station</i> , a general storage warehouse, and a refrigerator parts and service facility. Across 11th Avenue is New York Central Railroad Co.
1990	<b>Subject Property:</b> No Sanborn Map available.
	<b>Surrounding Properties:</b> No Sanborn Map available.
1996	<b>Subject Property:</b> The entire property is identified as N.Y. Telephone Co. Garage. Indicated as running underneath the Subject Property is New York Central Railroad.
	<b>Surrounding Properties:</b> Adjacent to the east appears to be used for commercial use. Across 35th Street appears vacant. Across 34th Street is the Federal Express Facility with one <i>20,000-gallon fuel oil tank and two, 30,000-gallon gasoline tank</i> indicated and the remainder is a <i>motor freight station</i> , a general storage warehouse, and a refrigerator parts and service facility. Across 11th Avenue is a railyard.

<b>Year</b>	<b>Description/Property Use</b>	<b>Distance/Direction</b>	<b>Assumed Hydraulic Gradient</b>
<b>1890</b>	Unknown type of factory	Subject Property	Subject Property
	Factory, Machine Shop and Railyard	Across 34th Street (South) and Across 11th Avenue (West)	Crossgradient and Downgradient
<b>1899</b>	Paper Factory	Adjacent to the East	Upgradient
	Foundry	Across 35th Street (North)	Crossgradient
<b>1930</b>	Two, 550-gallon Gasoline Tanks Buried, Blacksmith and Welding Facility	Subject Property	Subject Property
	Iron Works	Adjacent to the East	Upgradient
	Multiple Factories, Garage with one, 550-gallon Gasoline Tank Buried	Across 34th Street (South)	Crossgradient
<b>1950</b>	Garage with one, 550-gallon Gasoline Tank Buried	Across 34th Street (South)	Crossgradient
<b>1979</b>	Motor Freight Station	Subject Property	Subject Property
	Factory, Used Auto Parts Facility, US Post Office with Gasoline Tanks, Motor Freight Station	Adjacent to the North	Crossgradient
	US Post Office with two 30,000-gallon gas tanks and one 20,000-gallon fuel oil storage tank	Across 35th Street (North), Across 34th Street (South)	Crossgradient
<b>1996</b>	Federal Express with two 30,000-gallon gas tanks and one 20,000-gallon fuel oil storage tank and Motor Freight Station.	Across 34th Street (South)	Crossgradient



Hudson River

.50 mile

.25 mile

.13 mile

West St

W 30th St

W 27th St

W 25th St

W 23rd St

10th Ave

W 29th St

W 28th St

9th Ave

W 33rd St

11th Ave

W 33rd St

Dyer Ave

West 39th St

West 39th St

West 40th St

8th Ave

W 43rd St

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