

# ENVIRONMENTAL SITE ASSESSMENT

PROPERTY LOCATED AT:

FLATLANDS AVE. & PENNSYLVANIA AVE.  
BROOKLYN, NEW YORK

03-172



PREPARED FOR:

INTEGRITY DEVELOPMENT, INC.  
700 GABESHEAD COURT  
SOUTH LAKE, TX 76092

APRIL 2003

PREPARED BY:

SOIL MECHANICS ENVIRONMENTAL SERVICES  
3770 MERRICK ROAD  
SEAFORD, NEW YORK 11783  
(516) 221-7500 FAX (516) 679-1900

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## EXECUTIVE SUMMARY

The following is a summary of findings obtained during a "Phase I" Environmental Site Assessment conducted at the subject property located at 12020 Flatlands Avenue, in Brooklyn, County of Kings, State of New York.

The subject property (approximately 10.0 acres) currently consists of a two-story masonry and steel framed building, surrounded by concrete walkways and asphalt paved parking areas, and vacant land. The subject building, occupied by New York Christian Cultural Centre, was reportedly constructed between 1997-2000. Soil Mechanics was informed that a gas collection/venting system was installed beneath the subject building due to the presence of methane gas.

Information obtained from previous investigations conducted at the subject property revealed that the site was originally marshlands and was landfilled during the early 1900's. Ash and residue from a city solid waste incinerator were reportedly used as fill material.

Review of historical Sanborn fire insurance maps revealed that several sheds, a wagon house, a residence, a gasoline filling station, a masons materials storage yard and associated storage building, an auto wrecking facility, a small commercial building, and automobile junkyards were formerly located at the subject property dating back to 1908.

Review of ownership records revealed several names of concern, i.e., Socony Mobil Oil Co., London Servicenter, and Marvic Service Station, Inc., etc. listed for Block: 4434 – Lot: 1 prior to 1960. Further, London Servicenter was involved in a declaration transaction, dated 06/24/48, at Block: 4431 – Lot: 1, Block 4432 – Lot: 1, and Block: 4433 – Lot: 1.

The results of an environmental investigation conducted at the subject property by AKRF, Inc. (Draft Environmental Impact Statement, dated June 1991) revealed elevated concentrations of methane in the area of the former gasoline service station, elevated levels of total petroleum hydrocarbons and metals throughout the subject property, and elevated concentrations of semi-volatile organics at several surface and subsurface locations. Further, elevated levels of metals, volatile organics, and semi-volatile organics were detected within aqueous samples collected from the project site.

The western portion (approximately 6.0 acres) of the site is currently improved and contains the subject building, surrounded by concrete walkways and asphalt paved parking areas. Inspection of the subject building revealed it to be divided into a sanctuary, classrooms, offices, bathrooms, cafeteria, kitchen, bookstore, sound room, and storage rooms amongst the two (2) floors. Further, two (2) passenger elevators were identified within the subject building. The eastern portion (approximately 4.0 acres) consisted of several deciduous trees, exposed surface soils, and overgrown secondary vegetation. A small excavation was noted along the western portion of this area. Rubber tires, metal, and demolition debris were observed to be intermixed with surface soils. An abandoned crane and several piles of rubber tires, demolition debris, and common household trash were identified at various locations.

One (1) pad-mounted electrical transformer was identified outside the southwestern portion of the subject building. Floor drains were observed within the kitchen area and bathrooms of the subject building. Numerous open grate and solid covered manholes were observed throughout the parking fields. Reportedly, said structures are associated with the on-site drainage system which discharge to the municipal sewer system.

There was no visible evidence to indicate the presence of any aboveground storage tanks (AST's), underground storage tanks (UST's), storage of chemicals, hazardous materials/wastes and/or water supply/ground water monitoring wells at the subject property.

A review of surrounding property use revealed several businesses, i.e., Getty and Amoco/BP service stations, Flatlands Auto Sales, Kings County Auto Salvage, 2H1 Auto Sales, Inc., a junkyard, commercial/industrial businesses, and Kent Cleaners, situated in close proximity to the subject property which are known to us as being associated with the types of operations that historically represent a potential for adverse impact to the environment. Further, review of historical Sanborn maps indicated several filling stations north of the subject property.

A review of various federal and state regulatory databases revealed one (1) **SHWS Site** (Pennsylvania Avenue Landfill) within a one (1) mile radius; one (1) **RCRIS SQG Site** (Flat Gas, Inc.) and one (1) **NYSDEC Registered Underground Storage Tank (UST) Site** (Flat Gas, Inc.) adjacent to the subject property; and a total of sixty-four (64) **NYSDEC LTANK & SPILL Sites** within a one-half mile radius. Of the sixty-four (64) **NYSDEC LTANK & SPILL Sites**, thirty (30) are listed as "active" status, meaning the spill investigations are on-going. The remaining **LTANK & SPILL Sites** are listed as "closed" status, meaning the spills have been cleaned up, all paper work completed, and no further action required by the **NYSDEC**. Of the thirty (30) "active" status sites, only one (1) is documented as affecting the groundwater (see Section 7.2).

## **1.0 PURPOSE**

The principal objectives of this "Phase I" Environmental Site Assessment were to identify and evaluate current site conditions, the visual presence or absence of contamination, possible sources of contamination, and potential environmental impairments at the subject property. The assessment was limited to historical research and site reconnaissance to evaluate the existence of any such conditions.

Consistent with generally accepted protocols, the "Phase I" Environmental Site Assessment did not include sampling or analysis of suspect materials which may have been observed on the subject property. The format of this assessment was predicated upon general guideline requirements established by individual lending institutions, American Society for Testing and Materials Standards (ASTM)(E 1527-00), various professional organizations, and our professional judgment.

### **1.1 Introduction**

Soil Mechanics Environmental Services (SMES) was retained by Mr. James M. Halek of Integrity Development, Inc. to perform a "Phase I" Environmental Site Assessment at the referenced property. Reconnaissance of all accessible portions of the subject property and of any improvements was performed by SMES personnel on March 27, 2003. The site representatives included Mr. James M. Halek of Integrity Development, Inc. and Dan Aizer of Legacy General Contracting Corp.

## 1.2 Site Location

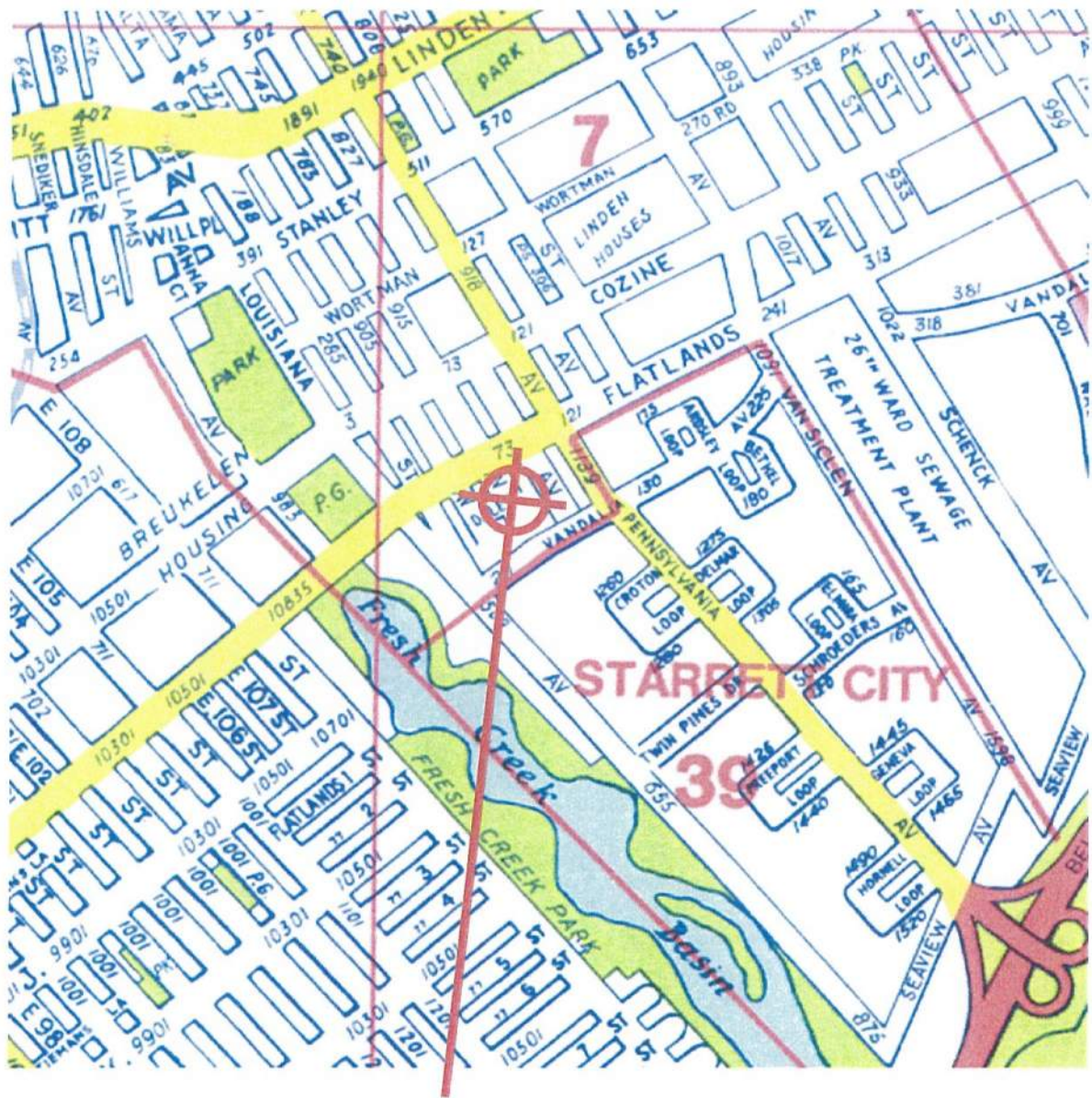
The subject property is located at 12020 Flatlands Avenue, north of Belt Parkway, south of Linden Boulevard (Route 27), and west of Pennsylvania Avenue in Brooklyn, County of Kings, State of New York (see Figure #1 – Project Location Plan). The subject property is currently designated as Block: 4430 – Lot: 1, Block: 4431 – Lot: 1, Block: 4432 – Lot: 1, Block: 4433 – Lot: 1, and Block: 4434 – Lots: 1 and 21 at the **Borough of Brooklyn Register's Office**. Further, the subject property consists of former beds of Malta, Alabama, Georgia, and Sheffield Avenues.

## 1.3 Scope of Work

Various items were identified during the scope of this investigation and included:

1. A thorough visual inspection ("walk-through") of the subject property.
2. A survey of the adjacent property for current land use.
3. Review of historical aerial photographs and/or Sanborn Maps in order to identify past and present land usage at the subject property.
4. Review of ownership history (title search) in an attempt to identify previous owners who may have impacted the environmental quality of the subject property.
5. Review latest information from federal, state, and local agencies, regarding environmental concerns at the subject property and any potential surrounding sites.
6. Evaluation of various factors obtained during the investigation.





**SUBJECT PROPERTY**



**SOIL MECHANICS**

**ENVIRONMENTAL SERVICES**

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**FIGURE #1  
PROJECT LOCATION PLAN  
BROOKLYN, NEW YORK**

SCALE:

N.T.S.

DATE:

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JOB NO.:

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#### 1.4 Previous Investigations

Previous geotechnical and environmental related investigations have been conducted at the subject property or portions thereof. These reports were reviewed as part of this Phase I Environmental Site Assessment and are summarized below (see copies of reports (text only) in Appendix):

Fresh Creek Estates, Technical Memorandum to the Draft Environmental Impact Statement, dated June 1991; Prepared for: Department of Environmental Protection; Prepared by: AKRF, Inc.

This assessment was done as part of an overall environmental review under the New York City Environmental Quality Review (CEQR) process with Departments of City Planning (NYCDCP) and Environmental Protection (NYCDEP) acting as co-lead agencies.

The site was originally marshlands and was landfilled during the early 1900's. Ash and residue from a city solid waste incinerator were used as fill material. Prior to 1950, a gasoline station at the corner of Pennsylvania and Flatlands Avenues and two (2) small wooden stables occupied parts of the site. Automobile junkyards were also once located on portions of the site.

The objectives of this assessment were to establish baseline soil and groundwater quality conditions and to evaluate the potential impact posed by existing subsurface conditions on the planned building activities at the site.

An electromagnetic survey was conducted at the subject property. Results of this survey revealed two (2) anomalies near Flatlands Avenue and one (1) anomaly near the southern portion of the site near Vandalia Avenue. Test pits, each to a depth of 7.0 feet below grade surface, were excavated at these locations which revealed the following at test pit #3: auto parts, such as gasoline tanks and tire rims, and crushed drums. No metal objects were identified at test pits #1 and #2.

Results of a soil gas survey, conducted in the area of the former gasoline service station, did not indicate elevated non-methane volatile organic compounds. Methane concentrations were measured at relatively high levels, presumably resulting from organic material in the underlying marsh deposits and/or the fill material.

Results of soil sampling activities revealed elevated levels of total petroleum hydrocarbons and metals throughout the site and elevated concentrations of semi-volatile organics at several surface and subsurface locations. Elevated levels of metals, volatile organics, and semi-volatile organics were also detected within aqueous samples collected from the project site. AKRF states that the contaminants that are present at elevated levels are probably associated with the fill material or with suspended soil particles.

Based on the results of this investigation and their understanding of the project, AKRF recommended the following:

- The development and implementation of a health and safety plan (HASP). Air monitoring instruments should be operating during intrusive activities. After excavation and construction activities are completed, constituents within the site soils will, for the most part, remain separated from residents and the visiting population by coverage with buildings or pavement.
- The use of a soil barrier at portions of the site not built on or paved.
- Laboratory analyses of representative samples of the excavated soil will be required for off-site re-use or disposal.

Subsurface Investigation and Report, dated March 14 1994; Prepared for: McKissack & McKissak Architects, P.C.; Prepared by: SESI Consulting Engineers

The site is presently cleared, vacant and fenced parcel which was originally marshlands that were landfilled during the early 1900's. SESI understands that ash and residue from a city solid waste incinerator were used as fill material. It also appears that some more recent miscellaneous fill has been dumped on the site. Reportedly, prior to 1950, a gasoline station existed at the corner of Pennsylvania and Flatlands Avenue and automobile junkyards were once located on portions of the property.

A total of eight (8) borings were drilled to depths varying from 26.0 to 51.5 feet below presently existing grade. All the borings encountered a miscellaneous fill to depths varying from 18.5 to 35.0 feet below presently existing grade. The fill has a high percentage of cinders and ashes mixed with sand, silt, gravel, and clay, with inclusions of various debris such as concrete, wood, rubble, metal, brick, glass, asphalt, etc. Groundwater was encountered in all of the borings at depths varying from 17.0 to 23.0 feet below presently existing grade.

Phase I Environmental Site Assessment, dated July 1997; Prepared for: Legacy General Contracting Corp. (Owner Representative); Prepared by: Soil Mechanics Environmental Services

During the time of this report, the subject property (approximately 6.0 acres) consisted of an approximate 100,000 square foot two-story building under construction. Level areas of exposed surface soils, numerous piles of soil, an office trailer, construction vehicles, and construction supplies were observed throughout the subject property.

## **2.0 SITE HISTORY**

The subject property currently consists of a two-story building occupied by New York Christian Cultural Centre and associated improvements and approximately 4.0 acres of vacant land. Soil Mechanics was informed that the existing building was constructed between 1997-2000.

Information obtained from previous investigations conducted at the subject property revealed that the site was originally marshlands and was landfilled during the early 1900's. Ash and residue from a city solid waste incinerator were reportedly used as fill material.

Review of historical Sanborn fire insurance maps revealed that several sheds, a wagon house, a residence, a gasoline filling station, a masons materials storage yard and associated storage building, an auto wrecking facility, a small commercial building, and automobile junkyards were formerly located at the subject property dating back to 1908.

### **2.1 Historical Topographic Maps**

Historical topographical maps are a valuable historical resource for documenting the prior use of a property and, due to their frequent availability, can be particularly helpful when other standard historical sources are not reasonably ascertainable. A review of historical topographic maps (obtained from EDR Inc., 3530 Post Road, Southport, CT), dated 1900, 1943, 1956, 1967, 1979, and 1995, revealed the following (see attached copies in Appendix):

1900 Topographic Map – The subject property appears to consist of marshlands and vacant land.

1943 Topographic Map – The subject property consisted of marshlands and vacant land. A road, likely former Sheffield Avenue, is shown running parallel to Pennsylvania Avenue at the eastern portion of the site.

1956 and 1967 Topographic Maps – The subject property consisted of two (2) structures located at the northeast portion and vacant land.

1979 and 1995 Topographic Maps – The subject property consisted of vacant land.

## **2.2 Review of Historical Sanborn Maps**

Soil Mechanics personnel reviewed all available historical Sanborn fire insurance maps (obtained from EDR Inc., 3530 Post Road, Southport, CT), dated 1908, 1928, 1950, 1967, 1969, 1977, 1979, 1980, 1981, 1983, 1986, 1987, 1989, 1991, 1992, 1993, 1994, 1995, and 1996, to identify past land usage of the subject property and surrounding area. A review of these Sanborn maps revealed the following (see copies of Sanborn maps in Appendix):

1908 Sanborn Map – The subject property consisted predominately of vacant land. A small shed and wagon house were identified on Block: 4433, in between former Georgia and Sheffield Avenues. The surrounding land use consisted mostly of vacant land to the north, south, east, and west. Notably, a florist was identified northeast of the subject property.

1928 Sanborn Map – The subject property consisted predominately of vacant land. Two (2) vacant sheds were identified at Block: 4433 and two (2) sheds and a residence were identified at or near Block: 4431. The surrounding land use consisted of vacant land and scattered residential structures to the north, south, east, and west.

1950 Sanborn Map – The subject property consisted of a filling station, a masons materials storage yard and associated storage building, and vacant land. The surrounding land use consisted of four (4) filling stations, an egg farm, auto wrecking facility, and scattered residential structures to the north and vacant land to the south and east. Land usage to the west was not provided.

1967 and 1969 Sanborn Maps – The subject property consisted of an auto wrecking facility, a masons materials storage yard and associated storage building, and three (3) small office buildings. Notably, northern areas of the site were utilized as auto junk yards. The surrounding land use consisted of four (4) filling stations, an egg farm, auto junk yards, and industrial/commercial businesses to the north; vacant land to the south; and vacant land and baseball batting range, golf driving range, and miniature golf to the east. Land usage to the west was not provided.

1977, 1979, 1980, 1981, 1983, 1986, and 1987 Sanborn Maps – The subject property consisted of a small commercial building, an auto wrecking facility, a warehouse building, and three (3) small office buildings. Notably, portions of the northern areas of the site were utilized as auto junk yards. The surrounding land use consisted of multi-story apartments to the south and east. Land usage to the north and west was not provided.

1989, 1991, 1992, 1994, 1995, and 1996 Sanborn Maps – The subject property consisted of a small commercial building and vacant land. Notably, portions of the northern areas of the site were utilized as auto junk yards. The surrounding land use consisted of multi-story apartments to the south and east. Land usage to the north and west was not provided.

### 2.3 History of Ownership

The **Borough of Brooklyn Register's Office** (Brooklyn, N.Y.) was visited in order to review past and present ownership, from approximately 1950 to the present, of the subject property (Block: 4430 – Lot: 1, Block: 4431 – Lot: 1, Block: 4432 – Lot: 1, Block: 4433 – Lot: 1, Block: 4434 – Lots: 1 and 21, and the former beds of Malta, Alabama, Georgia, and Sheffield Avenues) which may have involved hazardous materials. Several names of concern, i.e., Socony Mobil Oil Co., London Servicenter, and Marvic Service Station, Inc., etc. were listed for Block: 4434 – Lot: 1 prior to 1960.



Further, London Servicer was involved in a declaration transaction, dated 06/24/48, at Block: 4431 – Lot: 1, Block: 4432 – Lot: 1, and Block: 4433 – Lot: 1.

### **3.0 SITE DESCRIPTION**

#### **3.1 Facility Overview**

During the time of this assessment, the subject property (approximately 10.0 acres) consisted of a two-story masonry and steel framed building, surrounded by concrete walkways and asphalt paved parking areas, and vacant land. Fencing surrounds the entire subject property (see Figure #2 – Site Plan)(see attached photolog in Appendix). Soil Mechanics was informed by the site representatives that a gas collection/venting system was installed beneath the subject building due to the presence of methane gas.

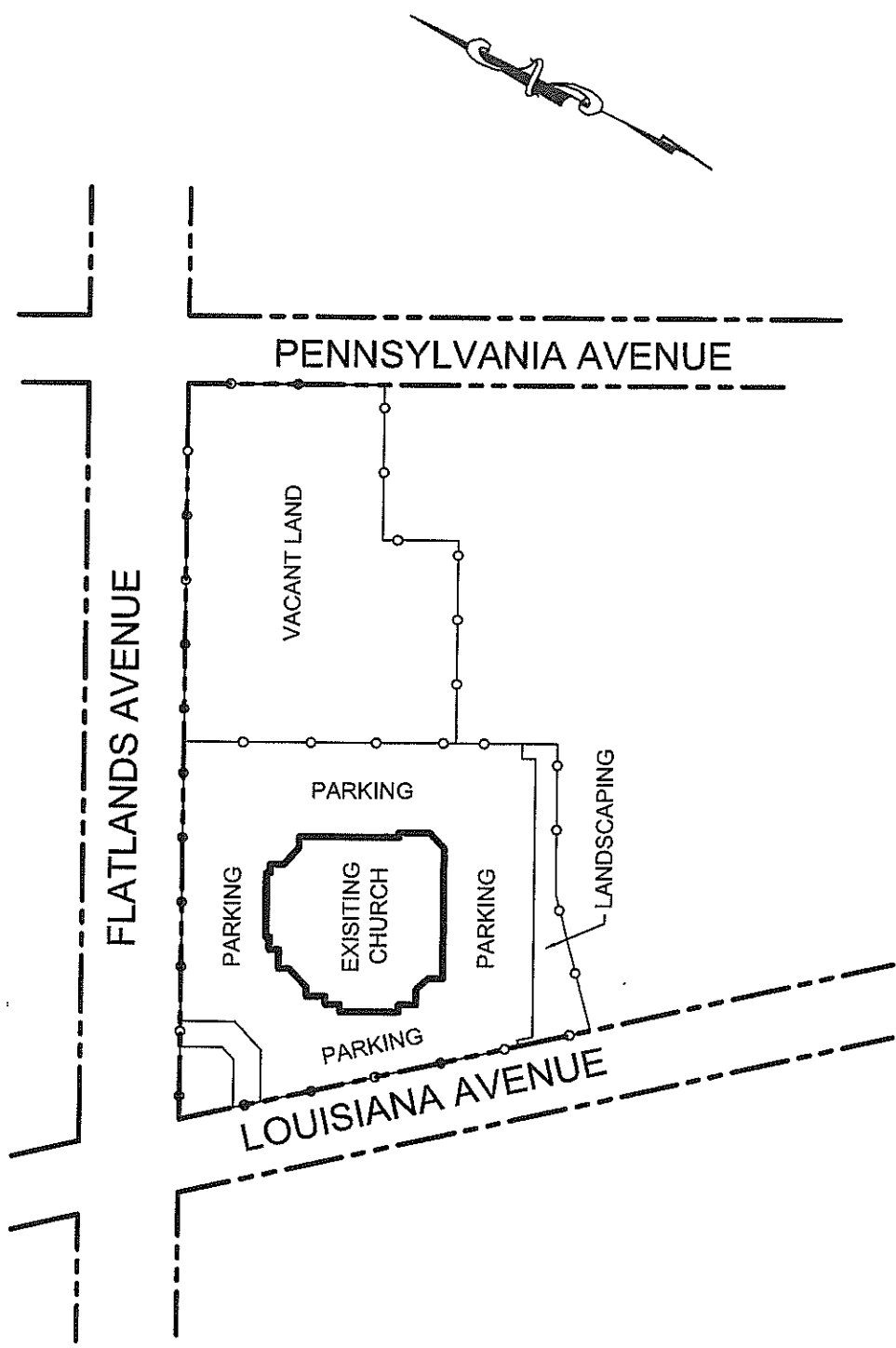
#### **3.2 Visual Inspection (interior)**

A visual inspection of the interior portions of the existing two-story masonry and steel framed building revealed it to be divided into a sanctuary, classrooms, offices, bathrooms, cafeteria, kitchen, bookstore, sound room, and storage rooms amongst the two (2) floors. Further, two (2) passenger elevators were identified within the subject building. Inspection of the elevator motor rooms revealed each motor unit to be in good condition with no visible signs of leakage or damage.

#### **3.3 Visual Inspection (exterior)**

A visual inspection of the exterior portions of the subject property revealed the following:





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3770 MERRICK ROAD - SEAFORD, L.I, NEW YORK - (516) 221-7500	
<b>SITE PLAN</b>	
FIGURE #2	
BROOKLYN, NEW YORK	
SCALE: N.T.S.	DATE: APRIL 9, 2003
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- The western portion (approximately 6.0 acres) of the site is currently improved and contains the subject building, surrounded by concrete walkways and asphalt parking areas. A wood-framed gazebo is located at the northwest portion of the site. One (1) pad-mounted electrical transformer, natural gas meters, and an emergency generator were identified outside the southwestern portion of the building. A garbage compactor unit, three (3) container boxes (containing building and landscaping equipment and supplies), a roll-off container (containing common trash), a bob cat, and miscellaneous storage of landscaping materials were identified outside the southeastern portion of the building. Numerous open grate and solid covered manholes were observed throughout the parking fields. Reportedly, said structures are associated with the on-site storm water drainage system which discharge to the municipal sewer system.
- The eastern portion (approximately 4.0 acres) of the subject property consists of vacant land comprised of several deciduous trees, exposed surface soils, and overgrown secondary vegetation. A small excavation was noted along the western portion of this area. Rubber tires, metal, and demolition debris were observed to be intermixed with surface soils. An abandoned crane and several piles of rubber tires, demolition debris, and common household trash were identified at various locations.

#### 4.0 VISUAL DISTURBANCES

During this inspection, the subject property revealed no visible evidence that could be attributed to major spills or discharges of hazardous materials or hazardous wastes.

All existing vegetation, on or about the subject property, appeared in good condition and showed no sign of unusual stress being placed upon it relative to the environmental conditions at the subject property.

## 5.0 SITE OPERATIONS AND UTILITIES

### 5.1 Electrical Transformer(s)

One (1) pad mounted electrical transformer was identified outside the southwestern portion of the subject building. The aforementioned transformer is owned and maintained by **Consolidated Edison Company of New York, Inc. (Consolidated Edison)**. Inspection of the transformer revealed it to be in good condition, with no visible signs of leakage or damage. There were no pole mounted electrical transformers observed at the subject property.

### 5.2 Aboveground Storage Tank(s)(AST's)

There were no aboveground storage tanks (AST's) visually identified at the subject property.

### 5.3 Underground Storage Tank(s)(UST's)

There was no visible evidence, i.e., fill ports, vent pipes, to indicate the presence of underground storage tanks (UST's) at the subject property.

### 5.4 Utilities

Soil Mechanics was informed that the subject building is heated utilizing natural gas fired rooftop units. Natural gas and electricity are provided to the subject property by **Consolidated Edison**. The subject building is reportedly connected to the municipal sewer system for the disposal of sanitary wastes and provided with potable water by a municipal water company.

### 5.5 Chemicals, Hazardous Materials/Waste Storage, and Disposal

There were no chemicals, hazardous materials and/or hazardous wastes visually identified at the subject property.

## 5.6 Water Supply/Monitoring Well(s)

There was no visible evidence to indicate the presence of any water supply and/or ground water monitoring wells at the subject property.

## 5.7 Interior Drainage Structures

Floor drains were observed within the kitchen area and bathrooms of the subject building. Said structures are assumed to discharge to the municipal sewer system.

## 5.8 Exterior Drainage Structures

Numerous open grate and solid covered manholes were observed throughout the parking fields. Reportedly, said structures are associated with the on-site storm water drainage system which discharge to the municipal sewer system.

## 6.0 SURROUNDING PROPERTY USE

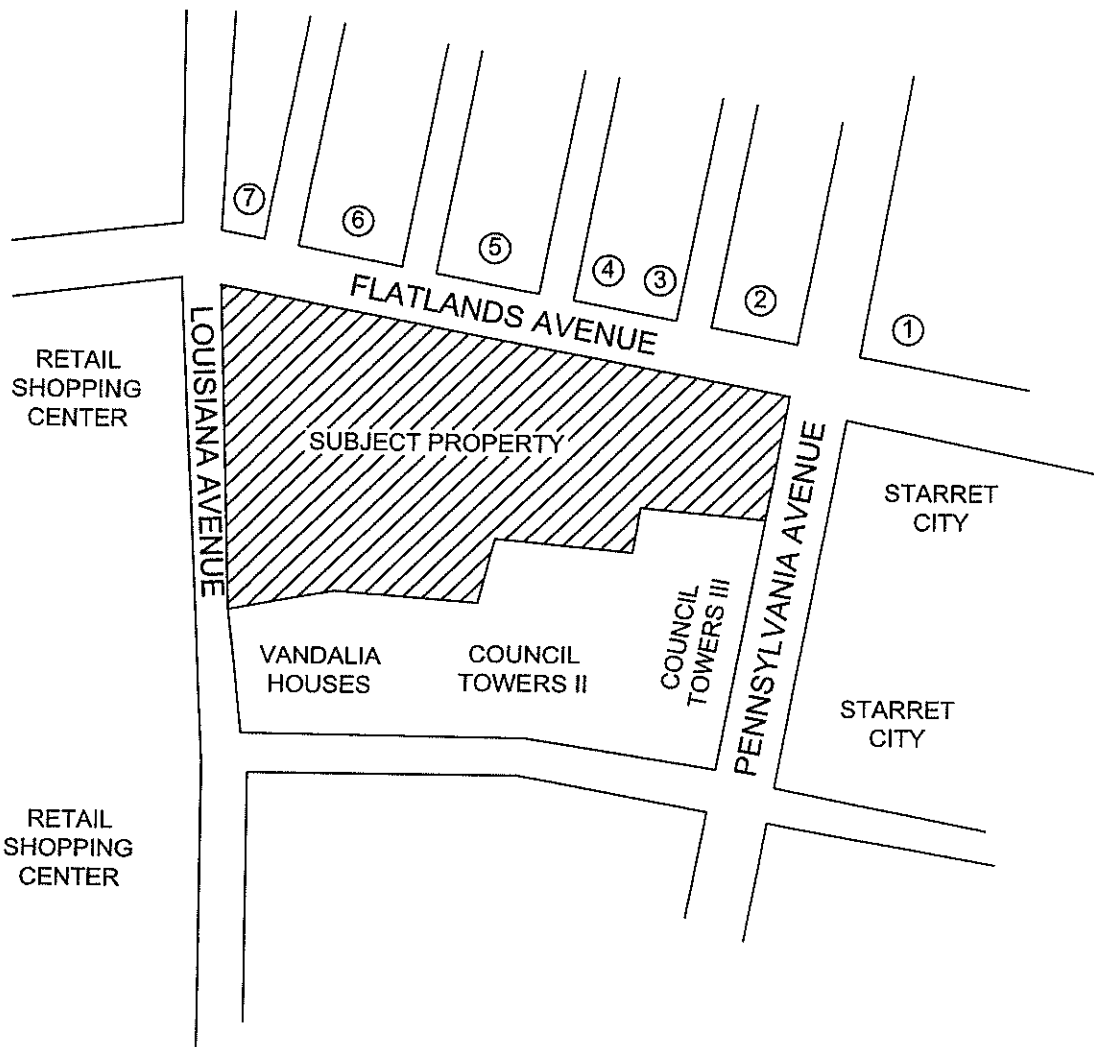
Adjacent land use surrounding the subject property consisted of the following (see Figure #3 - Surrounding Land Use Map):

North of the site: Getty service station, BP/Amoco service station/car wash/convenience store, a motel, Flatlands Auto Sales, Kings County Auto Salvage, 2H1 Auto Sales, Inc., junkyard, and commercial/industrial businesses.

South of the site: Multi-story apartment buildings (Vandalia Houses, Council Towers II, and Council Towers III).

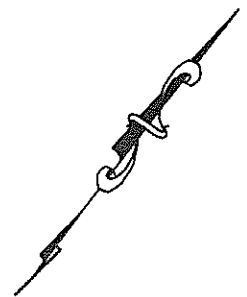
East of the site: Multi-story apartment buildings (Starrett City).

West of the site: Retail shopping centers (including Pathmark Supermarket, liquors, Chinese kitchen, shoes, jewelry, barber shop, martial arts, card store, Dunkin Donuts, auto insurance, Baskin Robbins, OTB, Kent Cleaners, stationary, International Food, Affordable Optical, and Hot Bagels).



**KEY:**

- ① GETTY SERVICE STATION
- ② BP/ AMOCO SERVICE STATION/ CARWASH/ CONVENIENCE STORE
- ③ MOTEL
- ④ FLATLANDS AUTO SALES
- ⑤ RINGS AUTO SALES
- ⑥ 2H1 AUTO SALES
- ⑦ JUNKYARD



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<b>SURROUNDING LAND USE MAP</b>		
FIGURE #3		
BROOKLYN, NEW YORK		
SCALE:	N.T.S.	DATE: APRIL 9, 2003
		JOB NO. 03S172
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A review of surrounding property use revealed several businesses, i.e., Getty and Amoco/BP service stations, Flatlands Auto Sales, Kings County Auto Salvage, 2H1 Auto Sales, Inc., a junkyard, commercial/industrial businesses, and Kent Cleaners, situated in close proximity to the subject property which are known to us as being associated with the types of operations that historically represent a potential for adverse impact to the environment.

## 7.0 AGENCY CONTACT

A review of various documentation, from appropriate federal, state, and local agencies, was conducted for the purpose of identifying any history of hazardous waste activity known to have occurred at the subject property or within a one mile radius. The standard environmental sources reviewed and approximate minimum search distances are pursuant to ASTM standards (see EDR-Radius Map report in Appendix).

### 7.1 Federal Agencies

**NPL – National Priority List** - a list compiled by the USEPA pursuant to CERCLA of properties with the highest priority for cleanup pursuant to EPA's Hazard Ranking System. The subject property did not appear as an **NPL Site**. There were no **NPL Sites** identified within a one mile radius.

**CERCLIS – Comprehensive Environmental Response Compensation and Liability – Information System List** – a list of sites compiled by the USEPA that they have investigated or are currently investigating for potential hazardous substance contamination for possible inclusion on the National Priorities List. The subject property did not appear as a **CERCLIS Site**. There were no **CERCLIS Sites** identified within a one-half mile radius.

**CERCLIS NFRAP – CERCLIS No Further Remedial Action Planned** – as of February 1995, CERCLIS sites designated “No Further Remedial Action Planned” (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. The subject property or adjoining properties did not appear as a **CERCLIS NFRAP Site**.

**CORRACTS Site** – The **Corrective Action Report** is a list of hazardous waste handlers with **RCRA Corrective Action Activity**. The subject property did not appear as a **CORRACTS Site**. There were no **CORRACTS Sites** identified within a one mile radius.

**RCRIS – Resource Conservation and Recovery Information System** – RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). The subject property did not appear as a **RCRIS TSD Site**. There were no **RCRIS TSD Sites** identified within a one (1) mile radius.

The subject property did not appear as a **RCRIS Large Quantity Generator (LQG) or Small Quantity Generator (SQG) Site**. There were no **RCRIS LQG Sites** identified adjacent to the subject property. The following **RCRIS SQG Site** was identified adjacent to the subject property:

1.) Flat Gas, Inc., located north of the subject property at 1130 Pennsylvania Avenue, in Brooklyn, N.Y. No violations were noted for this facility.

**ERNS Database** – USEPA’s Emergency Response Notification System is a computer database containing information on release notifications of oil and hazardous substances that have occurred throughout the United States and have been reported to the **National Response Center (NRC)** and/or one of the ten (10) USEPA regions. The subject property did not appear within the **ERNS Database**.

## 7.2 State Agencies

**SHWS – State Hazardous Waste Sites** – State hazardous waste site records are the State’s equivalent to CERCLIS. These sites may or may not be already listed on the Federal CERCLIS list. The subject property did not appear as an **NYSDEC Inactive Hazardous Waste Disposal Site**. The following **NYSDEC Inactive Hazardous Waste Disposal Site** was identified within a one mile radius:

- 1.) Pennsylvania Avenue Landfill, located approximately ¼ mile south of the subject property at Pennsylvania Avenue and Shore Parkway, in Brooklyn, N.Y. The site was operated by the New York City Department of Sanitation (NYCDOS) as a sanitary landfill from 1956 to 1962, with the final top soil cover placed in 1963. In 1972, the site was reactivated by the NYCDOS as a construction and demolition landfill. The site was deactivated and closed in 1985. The NYCDOS estimates that approximately 13 million gallons/year of hazardous wastes were disposed at this site. The shoreline was saturated with oil containing PCB’s and heavy metals, which were leaching into Fresh Creek. The Record of Decision (ROD) was issued in February 1995. The selected remedy required capping, active leachate and product collection in the trench, and active gas collection. Air sampling on the landfill and at downwind locations indicates the landfill has not affected levels of volatile organic contaminants in ambient air. Groundwater in the area is not used as a source of potable water, but contaminated groundwater may discharge into Jamaica Bay tidal waters.



**SWF/LF Sites – Solid Waste Facilities/Landfill Sites** – SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The subject property was not listed as a **NYSDEC SWF/LF Site**. There were no **NYSDEC SWF/LF Sites** identified within a one-half mile radius.

**NYSDEC UST List – Registered Underground Storage Tank List** – UST's are regulated under Subtitle I of the RCRA and must be registered with the state department responsible for administrating the UST program. The subject property did not appear within the **NYSDEC Registered Underground Storage Tank (UST) Database**. The following **NYSDEC Registered UST Site** was identified adjacent to the subject property:

1.) Flat Gas, Inc., located north of the subject property at 1130 Pennsylvania Avenue, in Brooklyn, N.Y. This facility has a total of five (5) in-service 4,000-gallon unleaded gasoline underground storage tanks (UST's) and five (5) closed-removed or closed-in place 4,000-gallon UST's registered with the NYSDEC.

A review of the **NYSDEC Leaking Storage Tank (LTANKS) and Spill (SPILL) Sites Databases** revealed no **LTANKS & SPILL Sites** reported at the subject property (12020 Flatlands Avenue, Brooklyn, N.Y.). A total of sixty-four (64) **NYSDEC LTANK & SPILL Sites** were listed within a one-half mile radius of the subject property (see EDR Report in Appendix for complete listing). Of these sixty-four (64) **NYSDEC LTANK & SPILL Sites**, thirty (30) are listed as “active” status, meaning the spill investigations are on-going. The remaining **LTANK & SPILL Sites** are listed as “closed” status, meaning the spills have been cleaned up, all paper work completed, and no further action required by the NYSDEC. Of the thirty (30) “active” status sites, one (1) is documented as affecting the groundwater and the remaining affected the land or sewer.

The following preliminary information was available regarding the “active” status NYSDEC LTANK & SPILL Site documented as affecting the groundwater:

1.) LTANK #: 94-12264, located northwest of the subject property at 400 Stanley Avenue, in Brooklyn, N.Y. Spill date: 12/12/1994; spill closed date: not reported; spill cause: tank test failure; resource affected: groundwater; spill notifier: tank tester; material: diesel. DEC Remarks: not reported. Spill Cause: Ex invest suspect remote fill – NYCFD was at site.

### **7.3 Local Agencies**

Since sufficient information was obtained regarding the historical use of the subject property, i.e., review of a city directory abstract, Sanborn fire insurance maps, and ownership records, the local building department search was excluded from this assessment. According to ASTM E-1527-00, Section 7.3.2.3, a standard historical source may be excluded (1) if the source is not reasonably ascertainable or (2) if past experience indicates that the source is not likely to be sufficiently useful, accurate, or complete in terms of satisfying 7.3.2.9 (uses of property).

### **8.0 HYDROGEOLOGIC INFORMATION**

Information obtained from the 7.5 minute series, Brooklyn, NY Quadrangle Topographic Map, published by the US Department of the Interior, Geological Survey, revealed that the subject property is located approximately fifteen to twenty (15-20) feet above sea level (see Figure #4 - Topographic Map). Notably, the project site is identified as a junkyard and two (2) buildings were present at the northeastern portion of the property.



**SUBJECT PROPERTY**



**SOIL MECHANICS**

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**FIGURE #4  
TOPOGRAPHIC MAP  
BROOKLYN, NEW YORK**

SCALE:

N.T.S.

DATE:

04/07/03

JOB NO.:

03-172

Information obtained from the Water Table on Long Island, New York, Mar. – Apr. 1984, prepared by the United States Department of Interior – Geological Survey, indicated an estimated depth to groundwater of approximately five to ten (5-10) feet below grade surface. This map indicates a southeasterly trending groundwater flow component towards local bodies of water. Notably, groundwater was encountered at depths varying from 17.0 to 23.0 feet below presently existing grade during the 1994 subsurface investigation completed by McKissak & McKissak Architects, P.C (see Section 1.4).

### 8.1 Surface Water Bodies

There was no visible evidence of any surface water bodies present on or contiguous to the subject property (i.e., rivers, streams, lakes, ponds, ditches, etc.). No runoff from surrounding areas was observed entering the subject property.

### 9.0 RADON POTENTIAL

According to the **State of New York Department of Health's** publication, Indoor Radon In New York State: Distribution, Sources, and Controls, "Long Island is part of the broader Atlantic Coastal Plain that stretches north and south along the east coast of the United States. Beneath the thick cover of glacial moraines and outwash, Long Island is underlain by flat-lying sedimentary rocks. Coarse, gravelly moraines extend the entire length of the island along the north coast and through the center. The rest of the island is covered by pebbly sand outwash with a few small areas of clay from former lakes. In general, the radium content of the soils is below average and their permeability is moderate to low. Based on these conditions, the entire island can be classified as having low indoor radon potential.

However, a number of the boulders in the moraines have been identified as emitting high levels of gamma radiation indicating the presence of uranium. These boulders are indicative of the sources for the sand and pebbles that cover most of the island. Isolated concentrations of uranium and radium may exist within the outwash deposited by way of the fluvial processes that deposited the sand. Homes, building on or into these concentrations, may possess elevated radon levels.”

## **10.0 SUMMARY OF FINDINGS**

- The subject property (approximately 10.0 acres) currently consists of a two-story masonry and steel framed building, surrounded by concrete walkways and asphalt paved parking areas, and vacant land. The subject building, occupied by New York Christian Cultural Centre, was reportedly constructed between 1997-2000. Soil Mechanics was informed that a gas collection/venting system was installed beneath the subject building due to the presence of methane gas.

- Information obtained from previous investigations conducted at the subject property revealed that the site was originally marshlands and was landfilled during the early 1900's. Ash and residue from a city solid waste incinerator were reportedly used as fill material.

- Review of historical Sanborn fire insurance maps revealed that several sheds, a wagon house, a residence, a gasoline filling station, a masons materials storage yard and associated storage building, an auto wrecking facility, a small commercial building, and automobile junkyards were formerly located at the subject property dating back to 1908.

- Review of ownership records revealed several names of concern, i.e., Socony Mobil Oil Co., London Servicenter, and Marvic Service Station, Inc., etc. listed for Block: 4434 – Lot: 1 prior to 1960. Further, London Servicenter was involved in a declaration transaction, dated 06/24/48, at Block: 4431 – Lot: 1, Block 4432 – Lot: 1, and Block: 4433 – Lot: 1.

- The results of an environmental investigation conducted at the subject property by AKRF, Inc. (Draft Environmental Impact Statement, dated June 1991) revealed elevated concentrations of methane in the area of the former gasoline service station, elevated levels of total petroleum hydrocarbons and metals throughout the subject property, and elevated concentrations of semi-volatile organics at several surface and subsurface locations. Further, elevated levels of metals, volatile organics, and semi-volatile organics were detected within aqueous samples collected from the project site.

- The western portion (approximately 6.0 acres) of the site is currently improved and contains the subject building, surrounded by concrete walkways and asphalt paved parking areas. Inspection of the subject building revealed it to be divided into a sanctuary, classrooms, offices, bathrooms, cafeteria, kitchen, bookstore, sound room, and storage rooms amongst the two (2) floors. Further, two (2) passenger elevators were identified within the subject building. The eastern portion (approximately 4.0 acres) consisted of several deciduous trees, exposed surface soils, and overgrown secondary vegetation. A small excavation was noted along the western portion of this area. Rubber tires, metal, and demolition debris were observed to be intermixed with surface soils. An abandoned crane and several piles of rubber tires, demolition debris, and common household trash were identified at various locations.

- One (1) pad-mounted electrical transformer was identified outside the southwestern portion of the subject building. Floor drains were observed within the kitchen area and bathrooms of the subject building. Numerous open grate and solid

covered manholes were observed throughout the parking fields. Reportedly, said structures are associated with the on-site drainage system which discharge to the municipal sewer system.

- There was no visible evidence to indicate the presence of any aboveground storage tanks (AST's), underground storage tanks (UST's), storage of chemicals, hazardous materials/wastes and/or water supply/ground water monitoring wells at the subject property.

- A review of surrounding property use revealed several businesses, i.e., Getty and Amoco/BP service stations, Flatlands Auto Sales, Kings County Auto Salvage, 2H1 Auto Sales, Inc., a junkyard, commercial/industrial businesses, and Kent Cleaners, situated in close proximity to the subject property which are known to us as being associated with the types of operations that historically represent a potential for adverse impact to the environment. Further, review of historical Sanborn maps indicated several filling stations north of the subject property.

- A review of various federal and state regulatory databases revealed one (1) **SHWS Site** (Pennsylvania Avenue Landfill) within a one (1) mile radius; one (1) **RCRIS SQG Site** (Flat Gas, Inc.) and one (1) **NYSDEC Registered Underground Storage Tank (UST) Site** (Flat Gas, Inc.) adjacent to the subject property; and a total of sixty-four (64) **NYSDEC LTANK & SPILL Sites** within a one-half mile radius. Of the sixty-four (64) **NYSDEC LTANK & SPILL Sites**, thirty (30) are listed as "active" status, meaning the spill investigations are on-going. The remaining **LTANK & SPILL Sites** are listed as "closed" status, meaning the spills have been cleaned up, all paper work completed, and no further action required by the **NYSDEC**. Of the thirty (30) "active" status sites, only one (1) is documented as affecting the groundwater (see Section 7.2).



## 11.0 DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

In our opinion, based upon the scope of this investigation, which included a thorough visual inspection of the subject property, a survey of adjacent land use, examination of publicly available records, review of historical Sanborn maps and/or historical aerial photographs, title search records, a review of various federal, state, and local documentation, and an evaluation of these factors, the following specific items are cited:

1.) With respect to the historic land usage of the subject property (i.e., auto junkyards, auto wrecking, gasoline filling station, etc.), the use of ash and residue from a city solid waste incinerator as fill material, and the documented presence of methane and soil and groundwater contamination, it is our opinion that the recommendations outlined in the Draft Environmental Impact Statement (dated June 1991) prepared by AKRF, Inc. be strictly followed. Further, a methane gas collection/venting system may be warranted in areas of proposed building(s). All future work activities should be conducted under the supervision of the NYCDEP and/or NYSDEC, as applicable. In the event that underground storage tanks (UST's) are encountered during development activities, we recommend that they be removed in accordance with local, state, and federal regulations.

2.) We recommend the proper removal and disposal of the abandoned crane and piles of rubber tires, demolition debris, and common household trash identified at the eastern portion of the site.

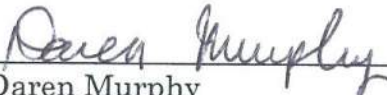
3.) In regard to the present and former surrounding property use of concern, adjacent **RCRIS SQG Site/NYSDEC Registered UST Site** (Flat Gas, Inc.), and "active" **NYSDEC LTANK/ SPILL Site** (LTANK #: 94-12264) documented as affecting the groundwater, most of these sites are located hydrodynamically upgradient in relation to the subject property and represent the potential for adverse impact to the groundwater quality beneath the subject property. Please be advised, however, that




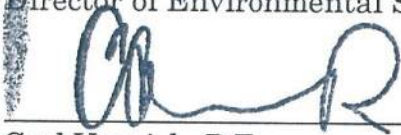
groundwater in the area of the subject property is not utilized for potable purposes. Further, any **LTANK/SPILL Sites** listed at these sites would be under the jurisdiction of the **NYSDEC**, wherein corrective actions would be required. Notably, a definitive determination of the groundwater quality beneath the subject property relative to these sites would require an appropriate subsurface investigation.

4.) Based on the hydrodynamic downgradient positioning of the **SHWS Site** (Pennsylvania Landfill), it is our opinion that this site does not represent a significant threat to the groundwater quality beneath the subject property.

5.) Based on the status, resource affected, distance away and/or hydrodynamic positioning of the sixty-four (64) **NYSDEC LTANK & SPILL Sites** identified within a one-half (1/2) mile radius (with the exception of LTANK #: 94-12264 mentioned earlier), in our opinion, none of these sites appear to represent an environmental concern to the subject property.

  
\_\_\_\_\_  
Daren Murphy  
Environmental Scientist

  
\_\_\_\_\_  
Robert J. Cardinale, M.S., C.P.G, P.G.  
Director of Environmental Services

  
\_\_\_\_\_  
Carl Vernick, P.E.  
President

### **Disclaimer**

The findings, conclusions, and recommendations presented in this report are based on information obtained within the scope of this investigation. The conclusions and recommendations represent our best judgment using the information presently available.

# APPENDIX

# PHOTOLOG



**VIEW OF EXISTING TWO-STORY CHURCH BUILDING**



**VIEW OF EXISTING TWO-STORY CHURCH BUILDING**





**VIEW OF SOUTH SIDE OF BUILDING AND  
PARKING AREAS**



**VIEW OF WEST SIDE OF BUILDING AND  
PARKING AREAS**



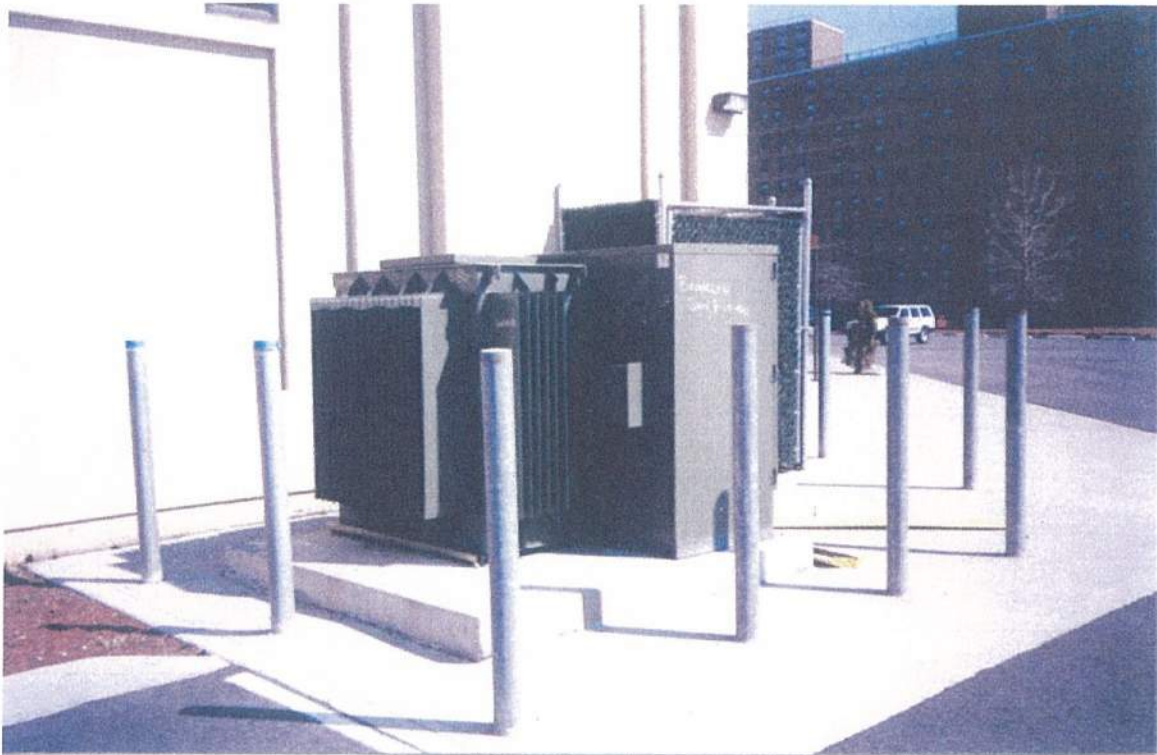


**VIEW OF NORTH SIDE OF BUILDING AND  
PARKING AREAS**

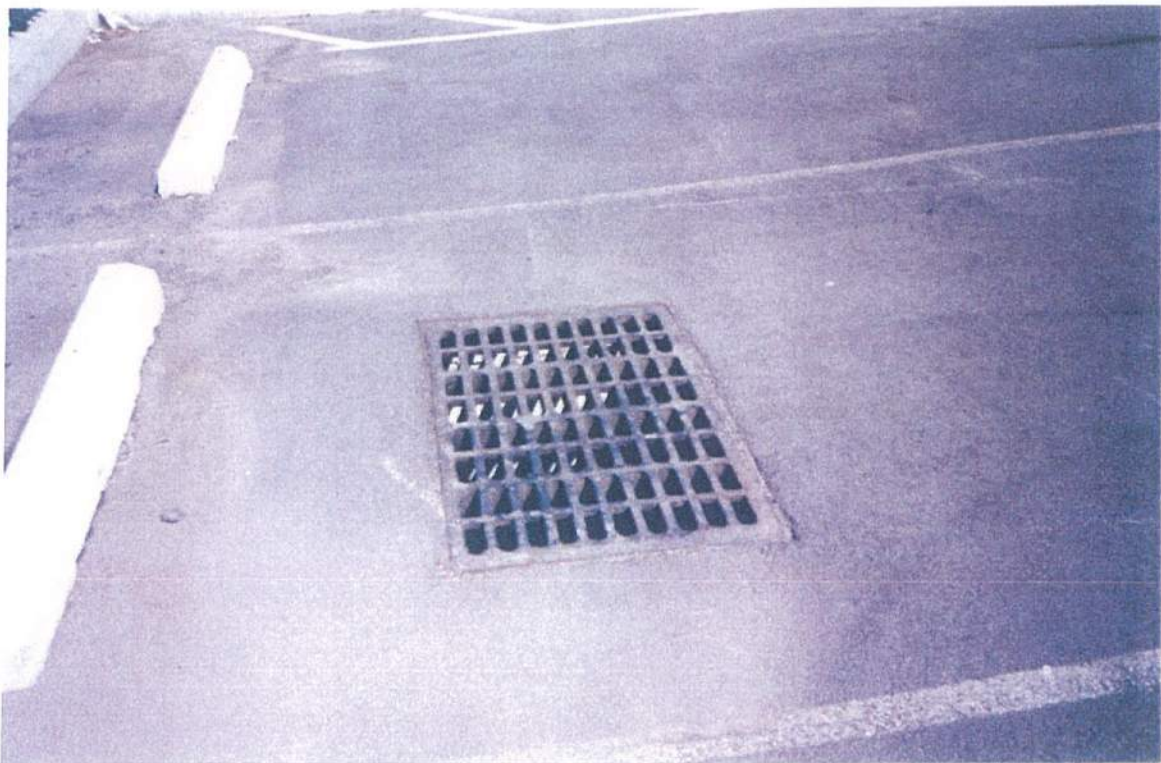


**VIEW OF GAZEBO**



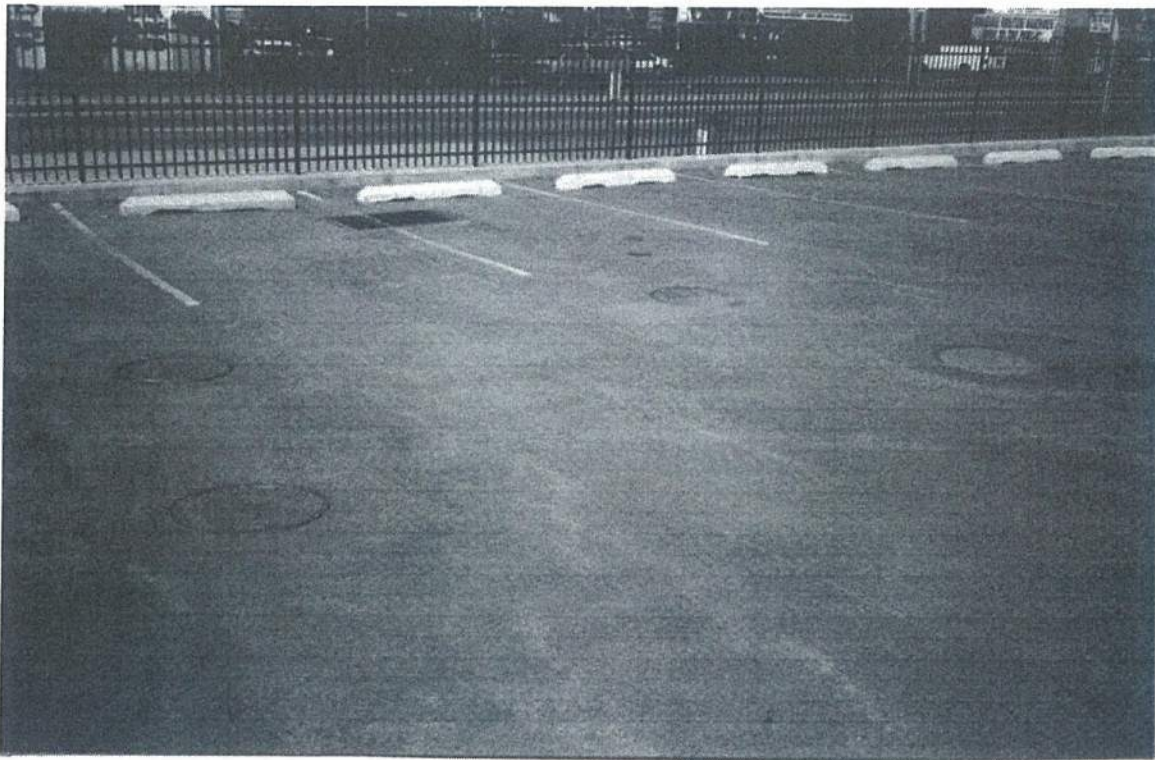


**VIEW OF PAD-MOUNTED ELECTRICAL TRANSFORMER**



**VIEW OF TYPICAL OPEN-GRATE SUBSURFACE  
DRAINAGE STRUCTURE**



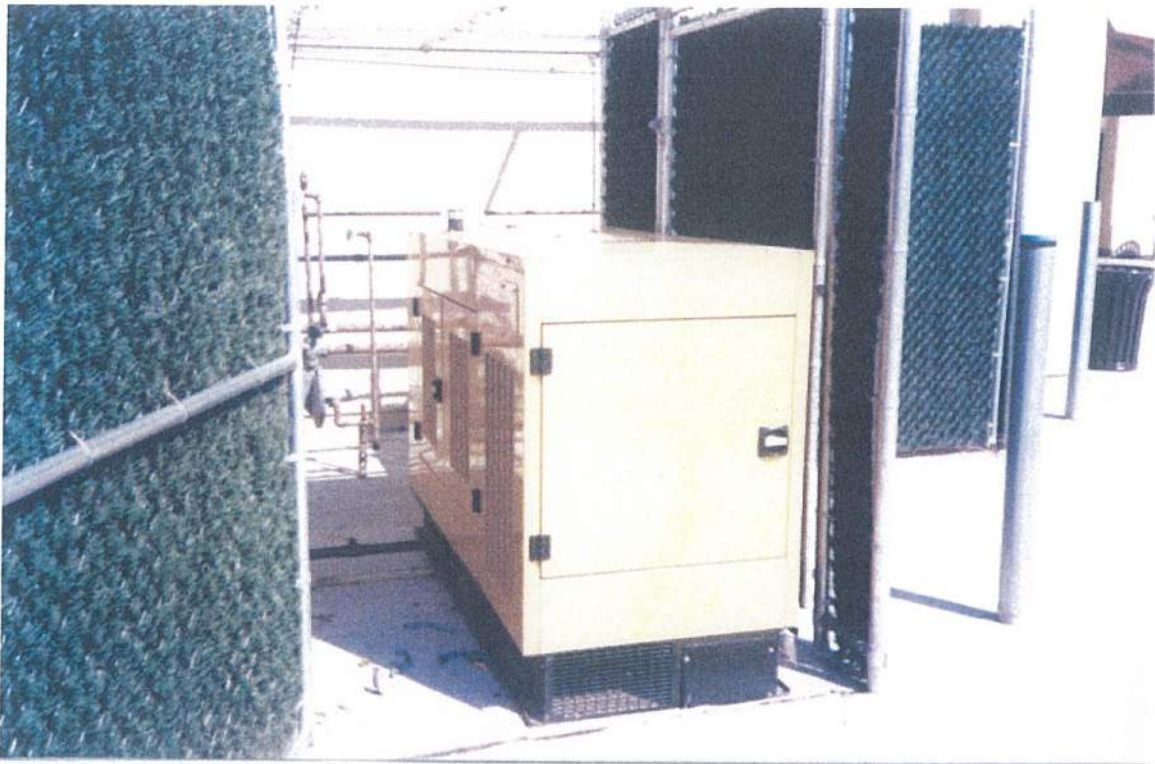


**VIEW OF TYPICAL SOLID MANHOLE COVERS IN A  
PARKING AREA**



**VIEW OF NATURAL GAS METERS**





**VIEW OF BACKUP GENERATOR**



**VIEW OF GARBAGE COMPACTOR UNIT**





**VIEW OF ELEVATOR MOTOR UNIT**



**VIEW OF ELEVATOR MOTOR UNIT**





**VIEW OF EASTERN 4.0 ACRES - LOOKING WEST**



**VIEW OF EASTERN 4.0 ACRES - LOOKING SOUTHWEST**





**VIEW OF EASTERN 4.0 ACRES - LOOKING NORTHEAST**



**VIEW OF EASTERN 4.0 ACRES - LOOKING EAST**





**VIEW OF PILE OF DEBRIS - LOCATED ON  
EASTERN 4.0 ACRES**



**VIEW OF PILE OF DEBRIS - LOCATED ON  
EASTERN 4.0 ACRES**

# HISTORIC TOPOGRAPHIC MAPS



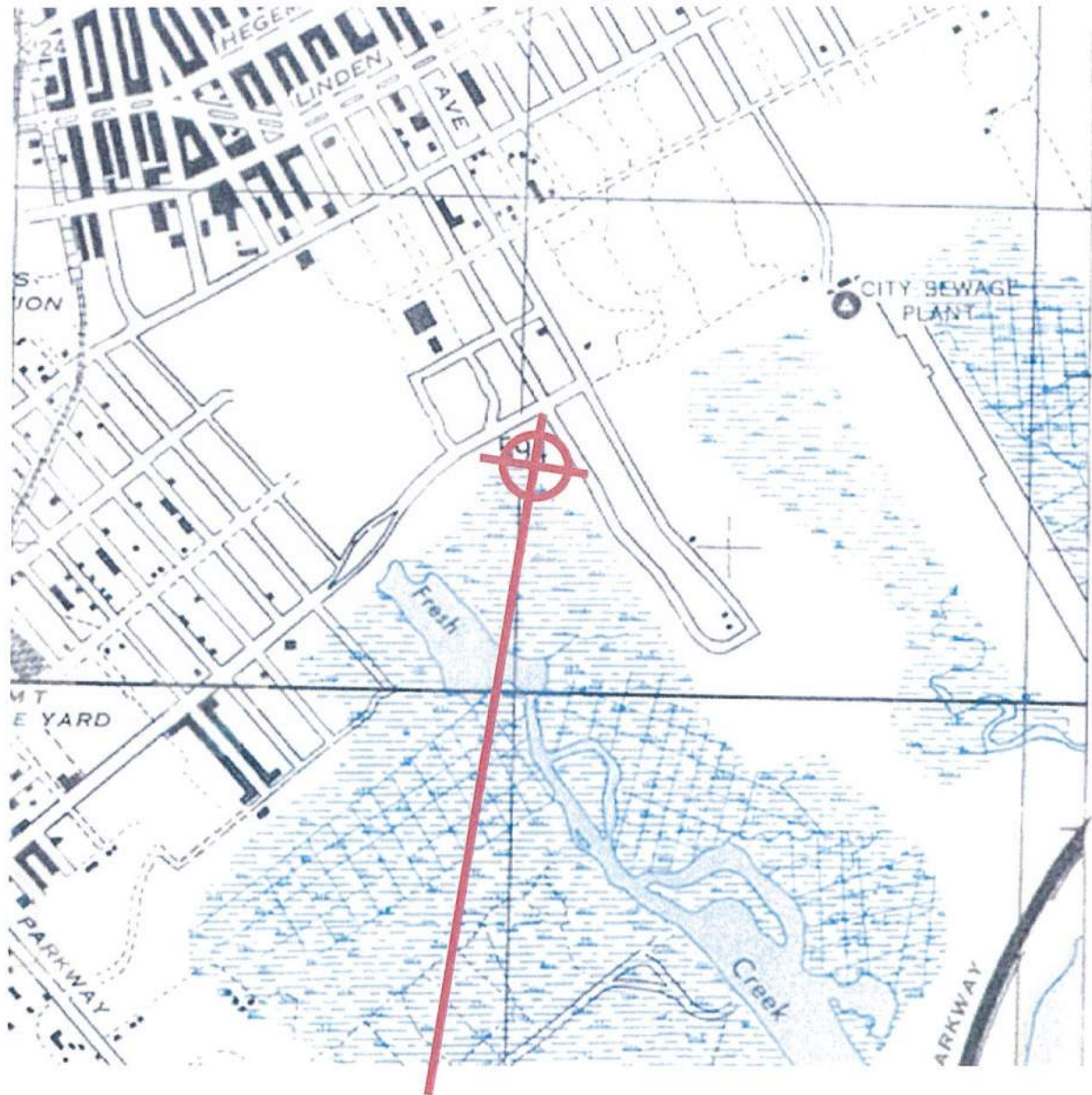


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<b>1900 TOPOGRAPHIC MAP</b>		
<b>BROOKLYN, NEW YORK</b>		
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N.T.S.	04/07/03	03-172

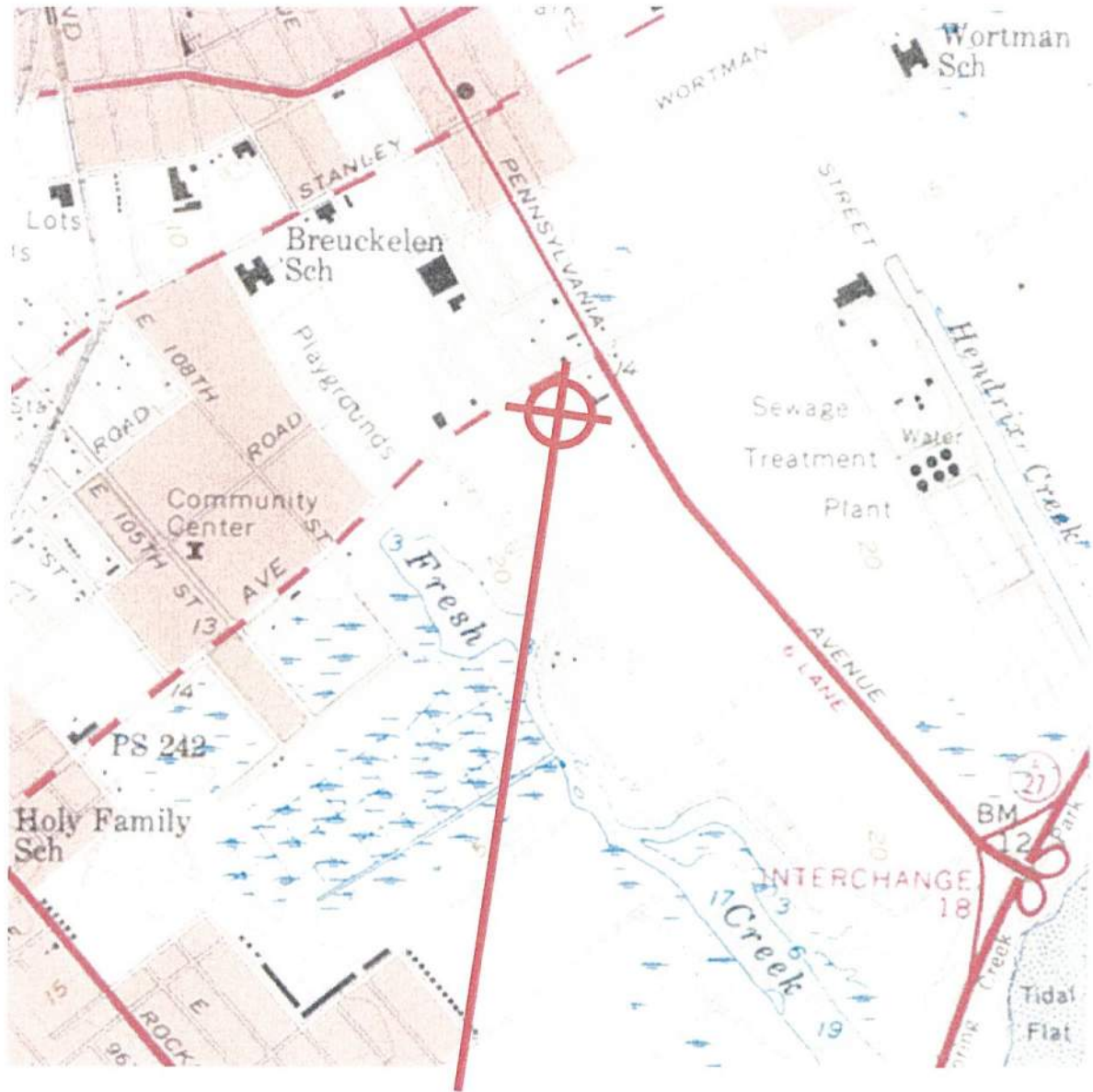




**SUBJECT PROPERTY**



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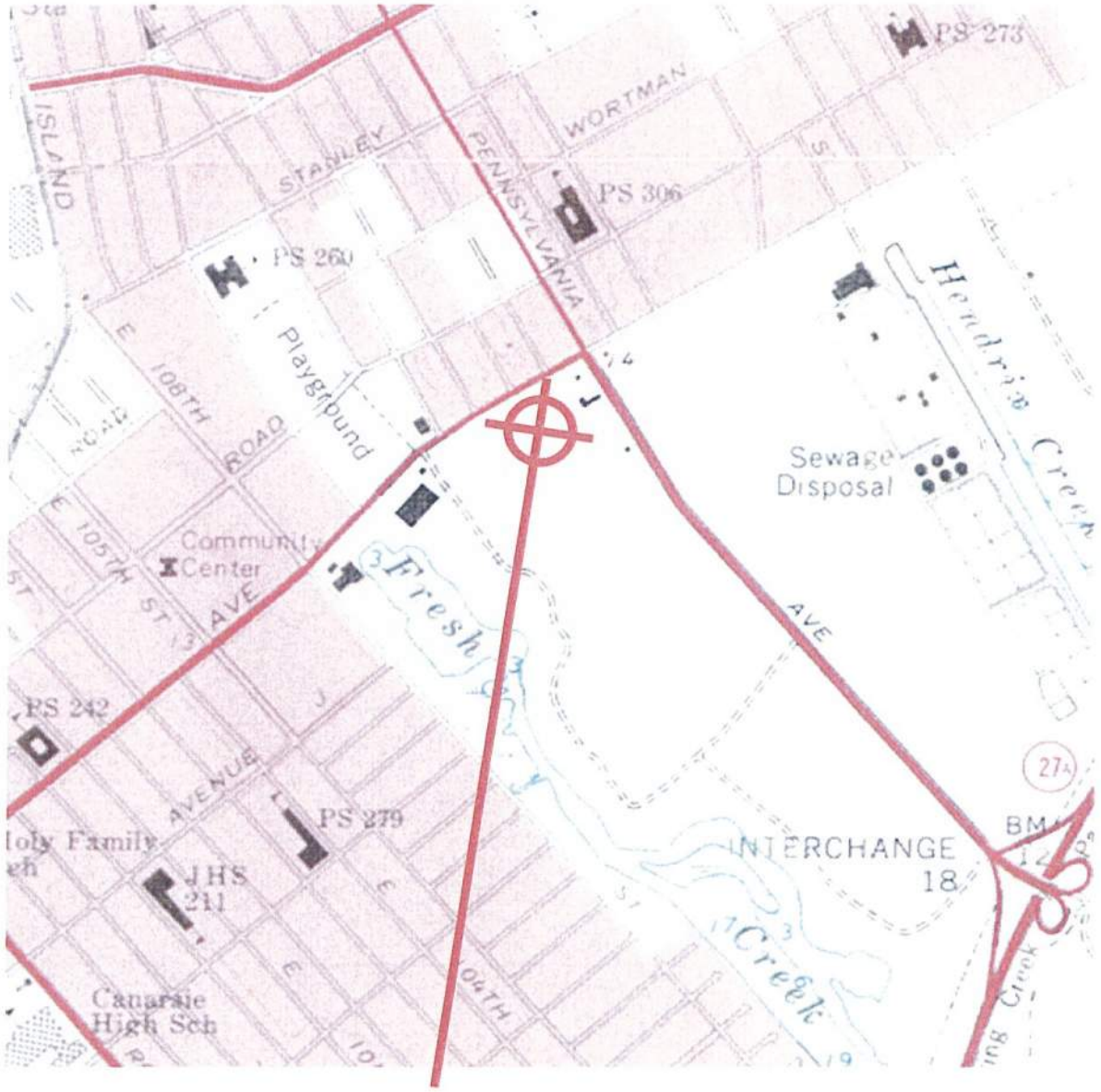


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	<b>1956 TOPOGRAPHIC MAP</b> <b>BROOKLYN, NEW YORK</b>		
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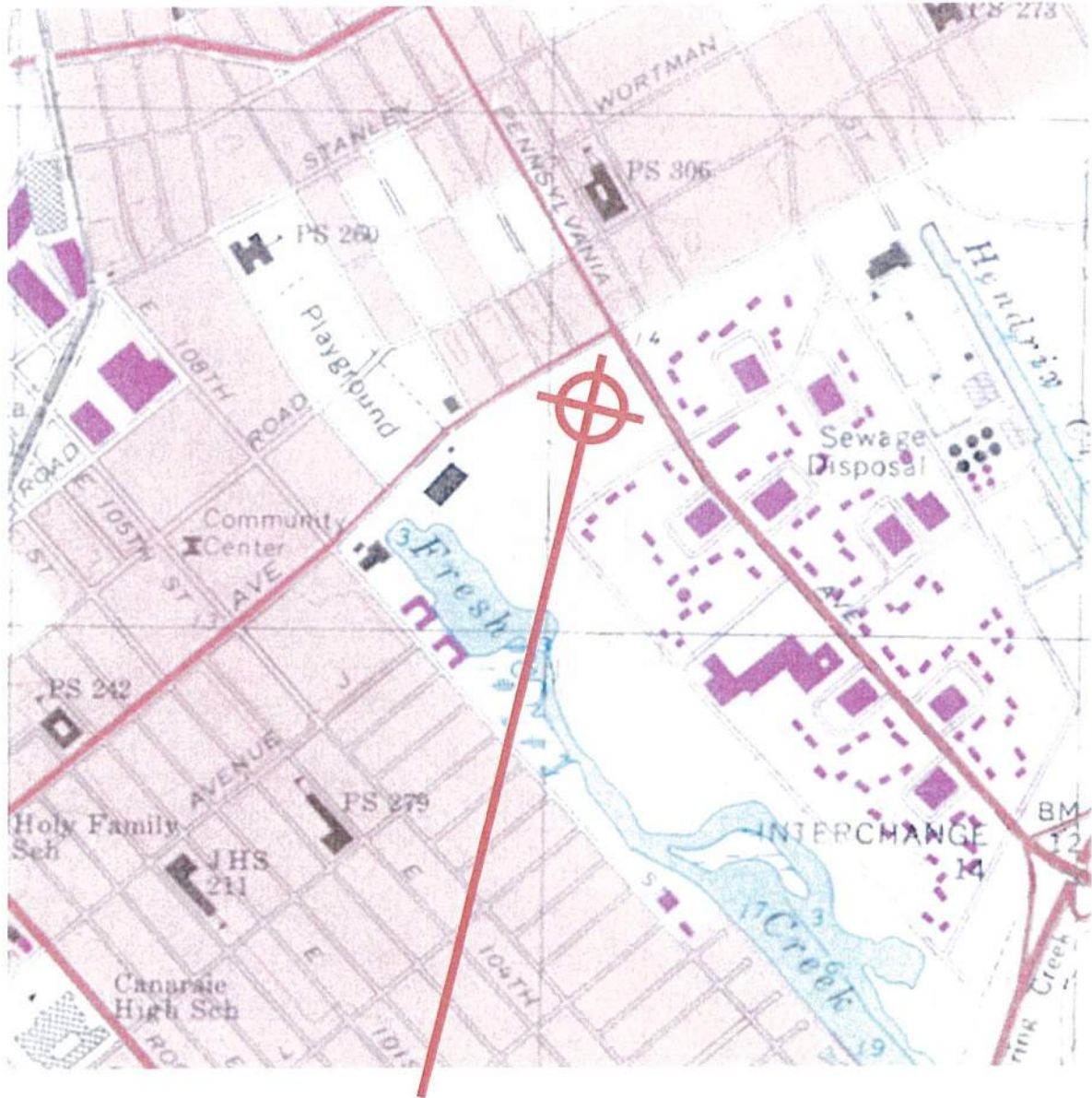




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	<b>1967 TOPOGRAPHIC MAP</b> <b>BROOKLYN, NEW YORK</b>		
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**1979 TOPOGRAPHIC MAP  
BROOKLYN, NEW YORK**

SCALE:

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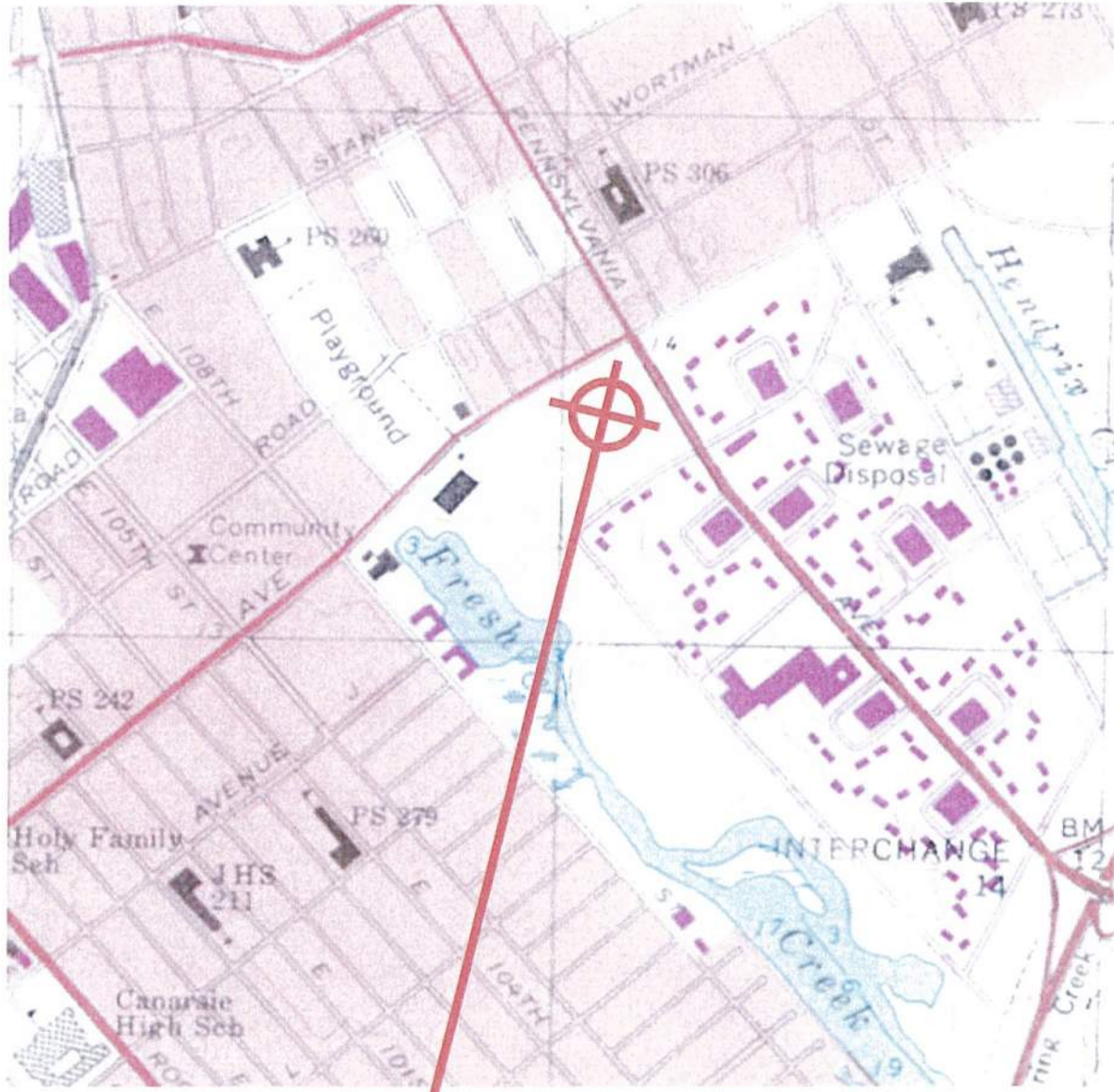
DATE:

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JOB NO.:

03-172





**SUBJECT PROPERTY**



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	<b>ENVIRONMENTAL SERVICES</b>	
3770 MERRICK ROAD - SEAFORD, NEW YORK 11783 (516) 221-7500		
<b>1995 TOPOGRAPHIC MAP</b>		
<b>BROOKLYN, NEW YORK</b>		
SCALE:	DATE:	JOB NO.:
N.T.S.	04/07/03	03-172

# HISTORIC SANBORN MAPS



"Linking Technology with Tradition"

# Sanborn® Map Report

**Ship to:** Daren Murphy

Soil Mechanics Environmental

3770 Merrick Road

Seaford, NY 11783

1012810MAS

516-221-7500

**Order Date:** 3/24/2003

**Completion Date:** 3/25/2003

**Inquiry #:** 0947163.4S

**P.O. #:** NA

**Site Name:** NY Christian Cultural Center

**Address:** 12020 Flatlands Avenue

**City/State:** Brooklyn, NY 11207

**Cross Streets:** Louisiana Avenue

Based on client-supplied information, fire insurance maps for the following years were identified

1908 - 1 - map	1981 - 1 - map	1994 - 1 - map
1928 - 1 - map	1983 - 1 - map	1995 - 1 - map
1950 - 1 - map	1986 - 1 - map	1996 - 1 - map
1967 - 1 - map	1987 - 1 - map	
1969 - 1 - map	1989 - 1 - map	
1977 - 1 - map	1991 - 1 - map	
1979 - 1 - map	1992 - 1 - map	
1980 - 1 - map	1993 - 1 - map	

Total Maps: 19

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## Sanborn® Map Report

**Ship to:** Daren Murphy

Soil Mechanics Environmental

3770 Merrick Road

Seaford, NY 11783

1012810MAS

516-221-7500

**Order Date:** 4/1/2003

**Inquiry #:** 0952300.1S

**P.O. #:** 03-172

**Site Name:** Adj-NY Christain Cultural Center

**Address:** 12020 FLATLANDS AVE

**City/State:** Brooklyn, NY 11207

**Cross Streets:**

**Completion Date:** 4/1/2003

Based on client-supplied information, fire insurance maps for the following years were identified

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1928 - 1 - map

1950 - 1 - map

1967 - 1 - map

1969 - 1 - map

Total Maps: 5

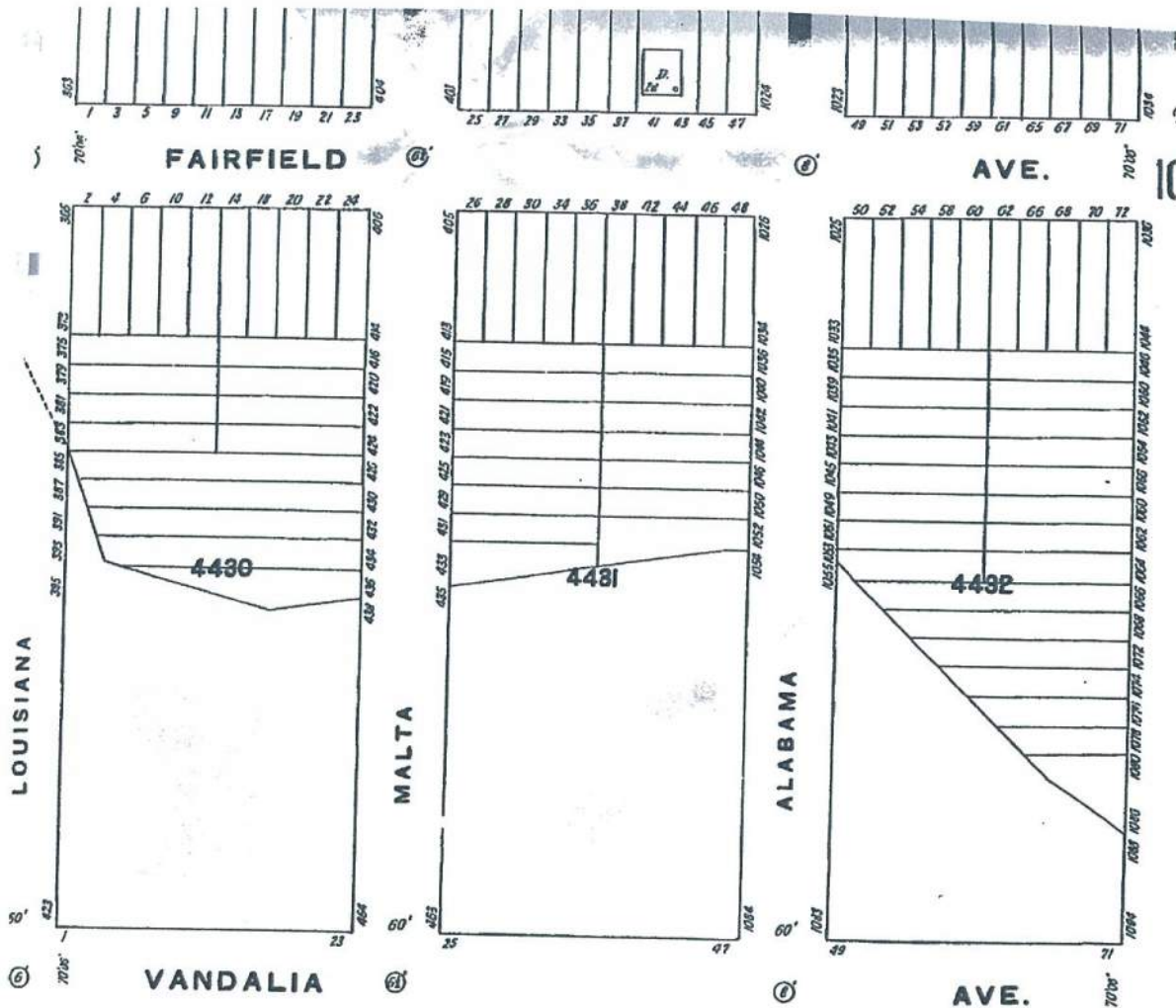
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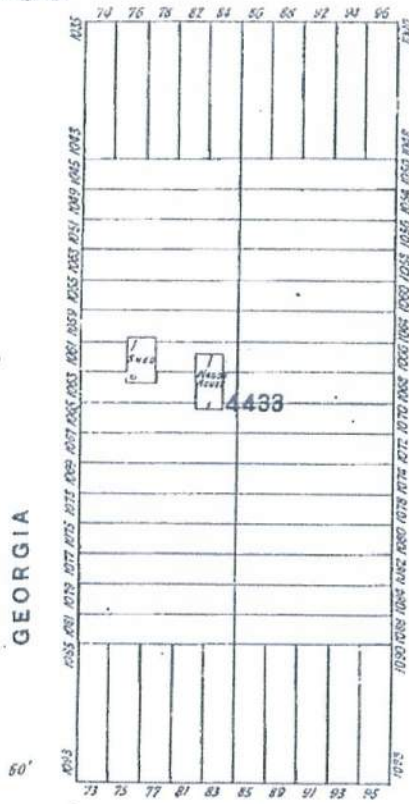
See Volume Seventeen, Borough of Brooklyn.



	<b>SOIL MECHANICS</b> <b>ENVIRONMENTAL SERVICES</b> 3770 MERRICK ROAD - SEAFORD, NEW YORK 11783 (516) 221-7500	
	<b>1908 SANBORN MAP</b> <b>LOUISIANA - GEORGIA AVE'S</b> <b>BROOKLYN, NEW YORK</b>	
SCALE: N.T.S.	DATE: 04/08/03	JOB NO.: 03-172

103

FAIRFIELD



GEORGIA

8

SHEFFIELD



PENNSYLVANIA

63

VANDALIA

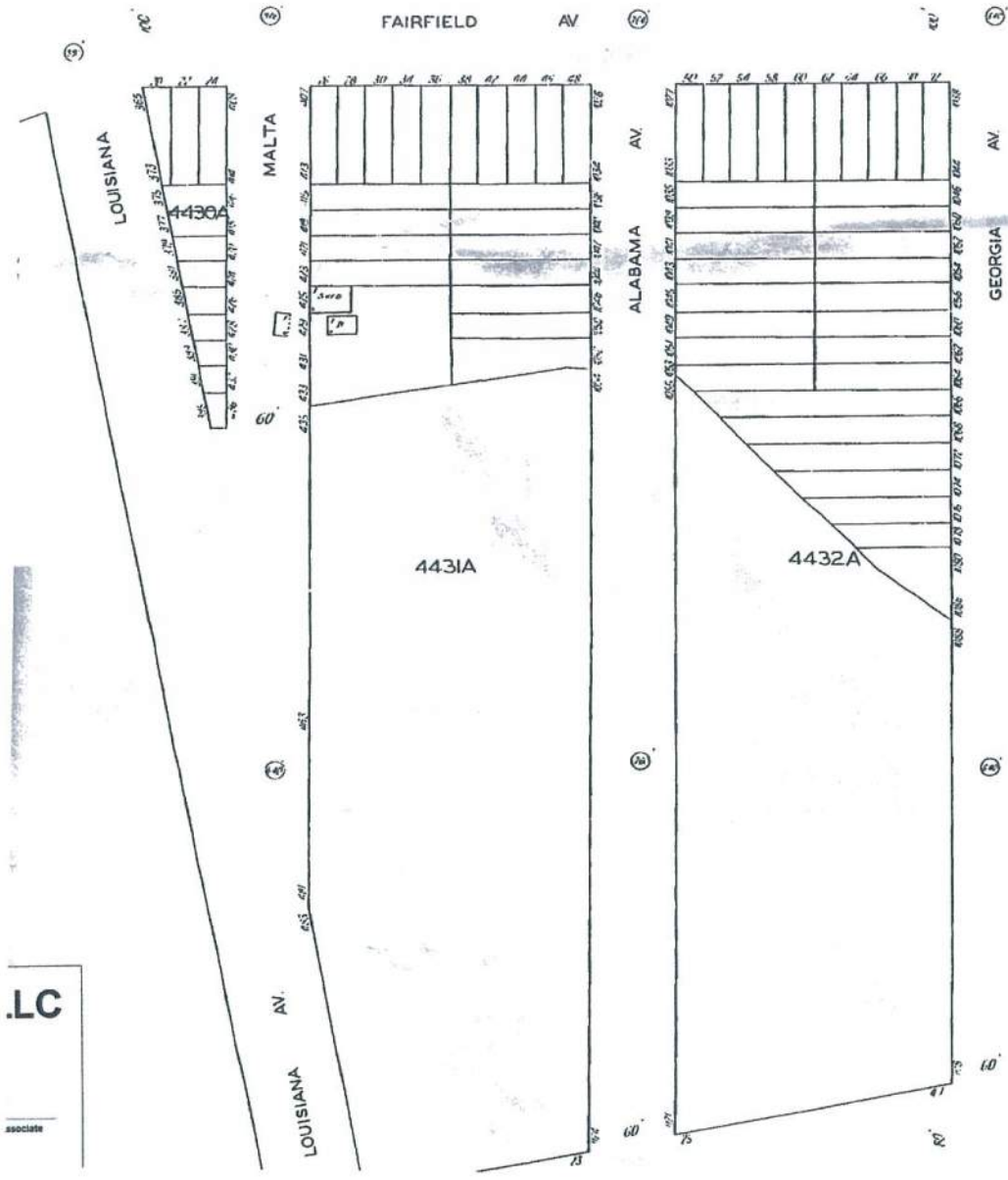
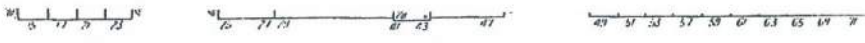
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63

See Volume Seventeen, Bc



	<b>SOIL MECHANICS</b> <b>ENVIRONMENTAL SERVICES</b> 3770 MERRICK ROAD - SEAFORD, NEW YORK 11783 (516) 221-7500	
	<b>1908 SANBORN MAP</b> <b>GEORGIA - PENNSYLVANIA AVE'S</b> <b>BROOKLYN, NEW YORK</b>	
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N.T.S.	04/08/03	03-172

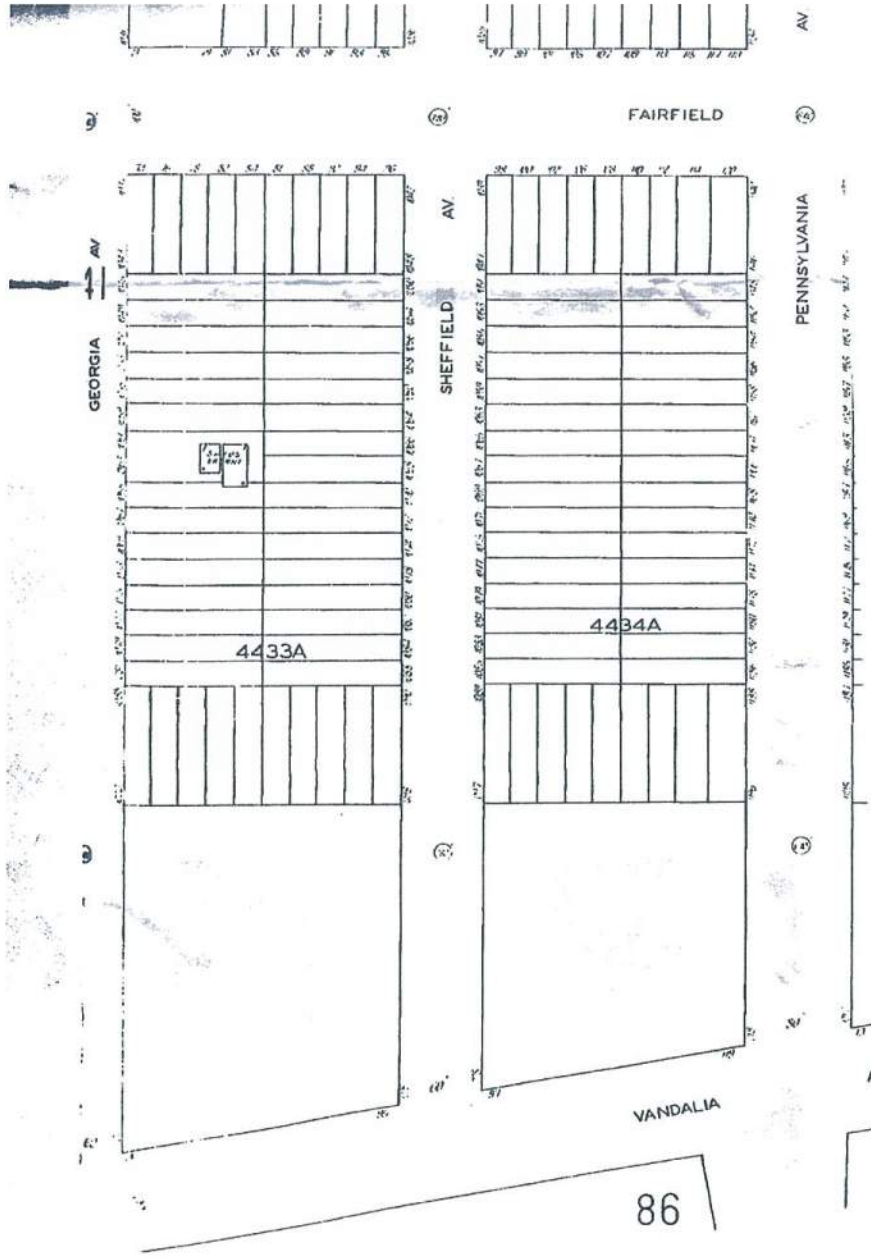


LC  
associate

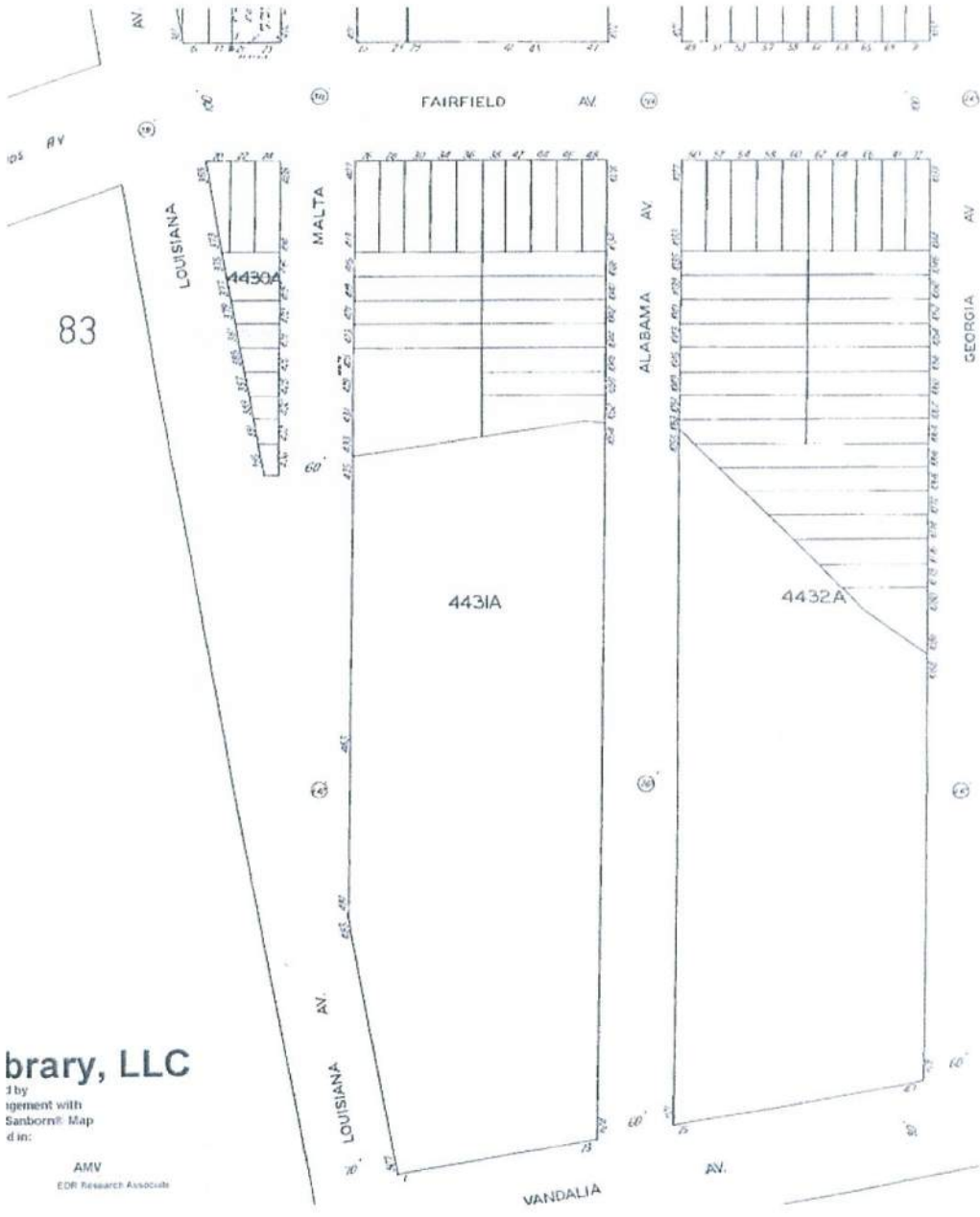


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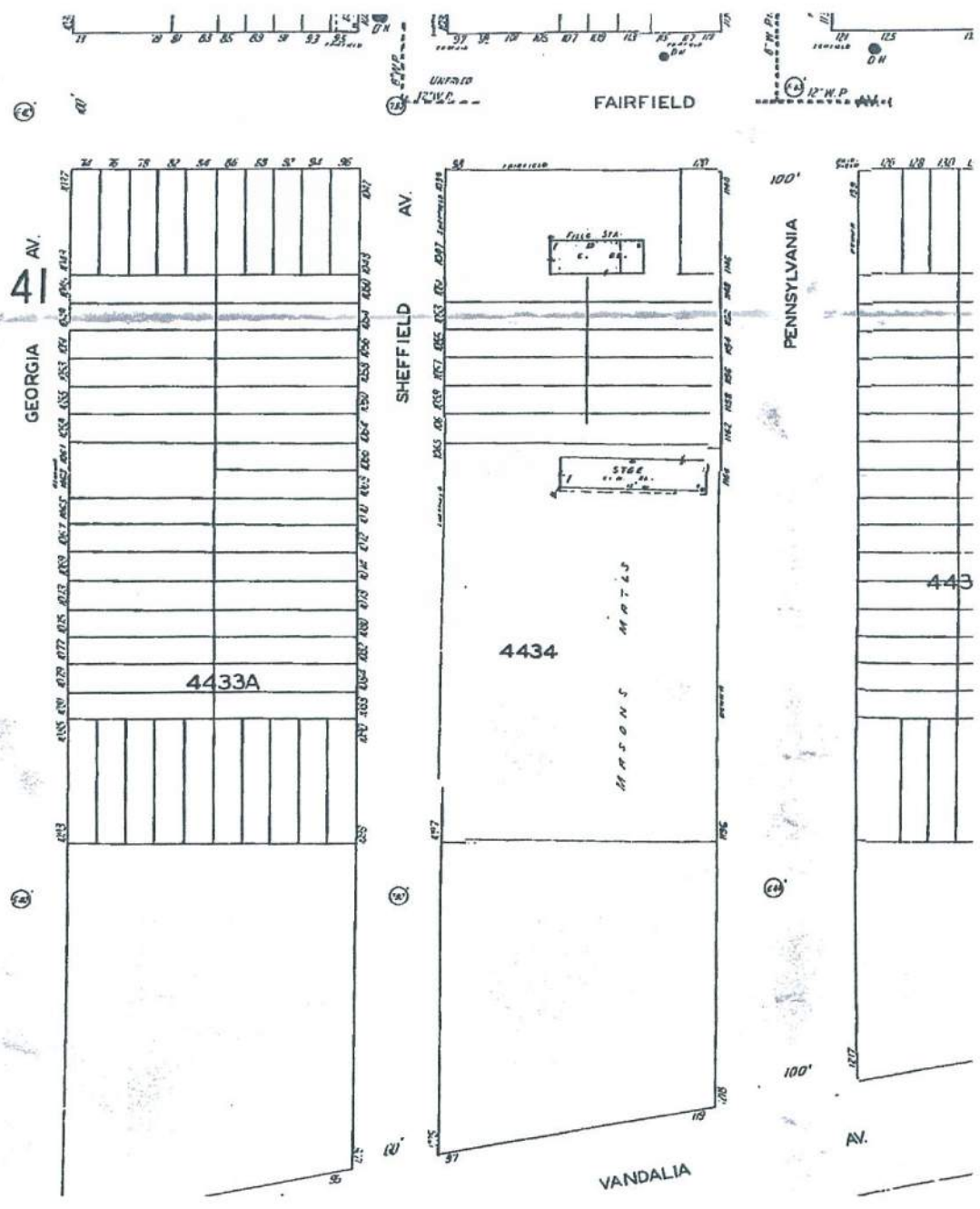
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	<b>1928 SANBORN MAP</b> <b>GEORGIA - PENNSYLVANIA AVE'S</b> <b>BROOKLYN, NEW YORK</b>	
	SCALE: N.T.S.	DATE: 04/08/03



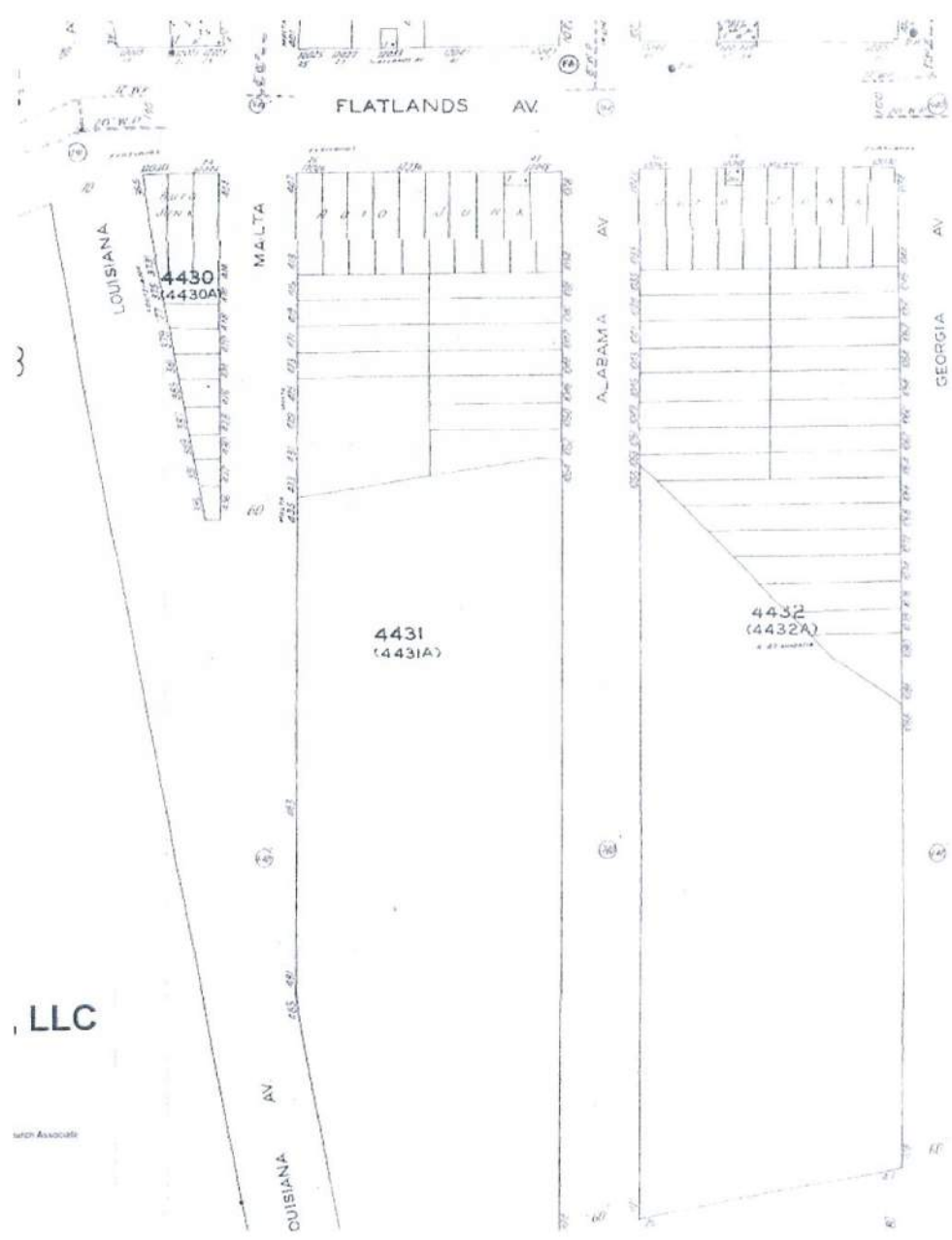
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	<b>SOIL MECHANICS</b>	
	<b>ENVIRONMENTAL SERVICES</b>	
	3770 MERRICK ROAD - SEAFORD, NEW YORK 11783 (516) 221-7500	
<b>1950 SANBORN MAP</b> <b>LOUISIANA - GEORGIA AVE'S</b> <b>BROOKLYN, NEW YORK</b>		
SCALE: N.T.S.	DATE: 04/08/03	JOB NO.: 03-172



	<b>SOIL MECHANICS</b> <b>ENVIRONMENTAL SERVICES</b> 3770 MERRICK ROAD - SEAFORD, NEW YORK 11783 (516) 221-7500	
	<b>1950 SANBORN MAP</b> <b>GEORGIA - PENNSYLVANIA AVE'S</b> <b>BROOKLYN, NEW YORK</b>	
	SCALE: N.T.S.	DATE: 04/08/03



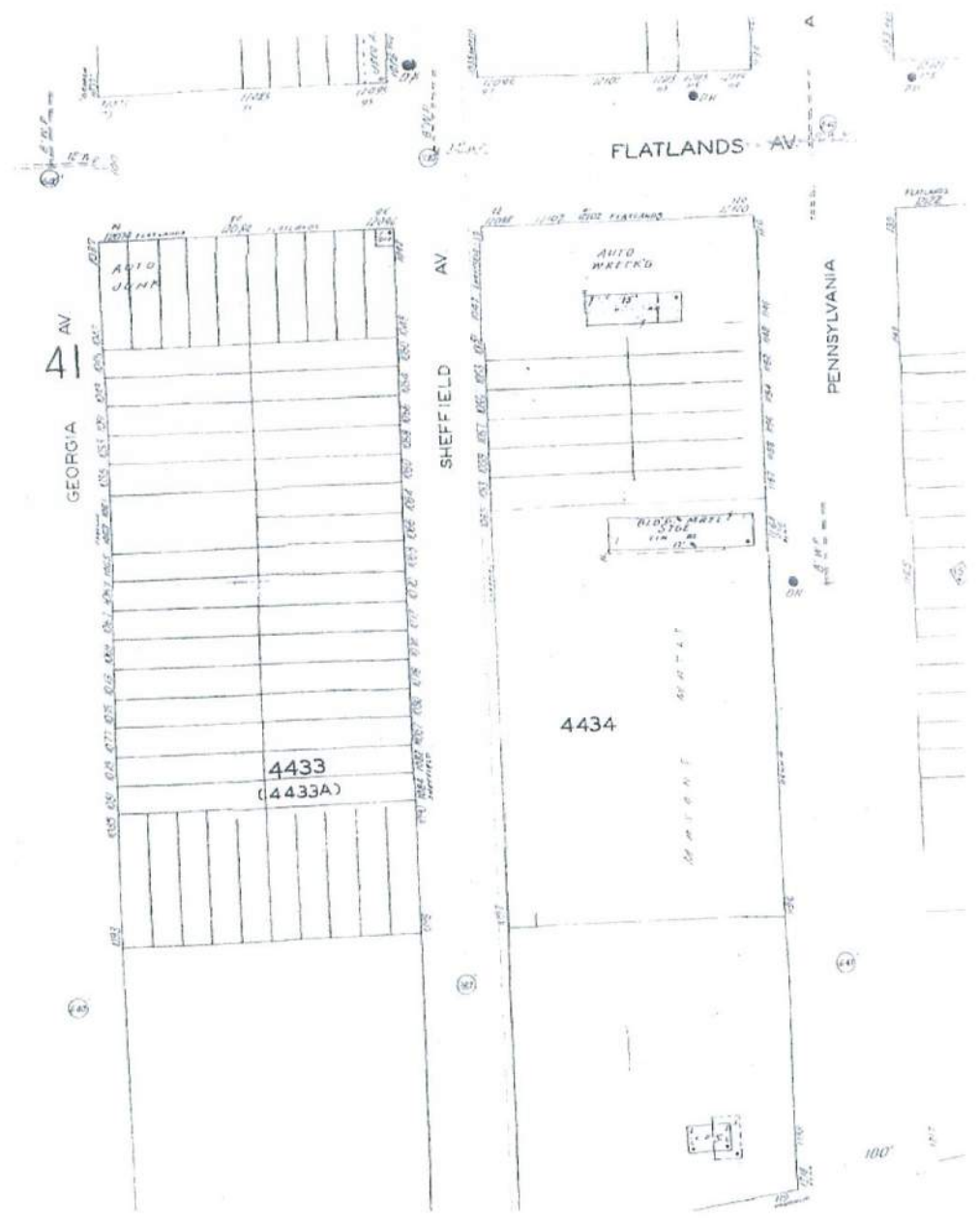
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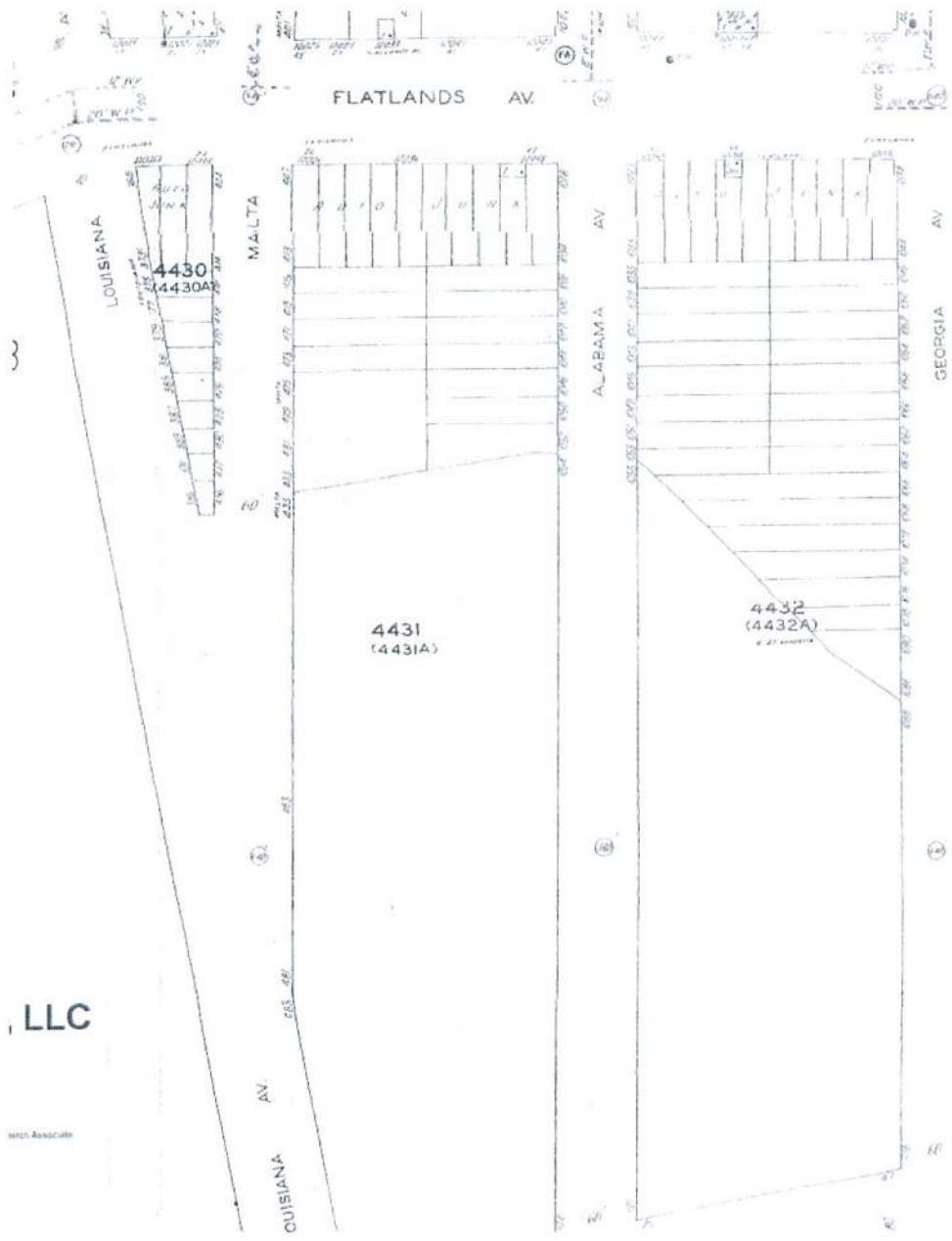
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	<b>1967 SANBORN MAP</b> <b>LOUISIANA - GEORGIA AVE'S</b> <b>BROOKLYN, NEW YORK</b>		
SCALE:	DATE:	JOB NO.:	
N.T.S.	04/08/03	03-172	





	<b>SOIL MECHANICS</b> <b>ENVIRONMENTAL SERVICES</b> 3770 MERRICK ROAD - SEAFORD, NEW YORK 11783 (516) 221-7500		
	<b>1967 SANBORN MAP</b> <b>GEORGIA - PENNSYLVANIA AVE'S</b> <b>BROOKLYN, NEW YORK</b>		
	SCALE: N.T.S.	DATE: 04/08/03	JOB NO.: 03-172



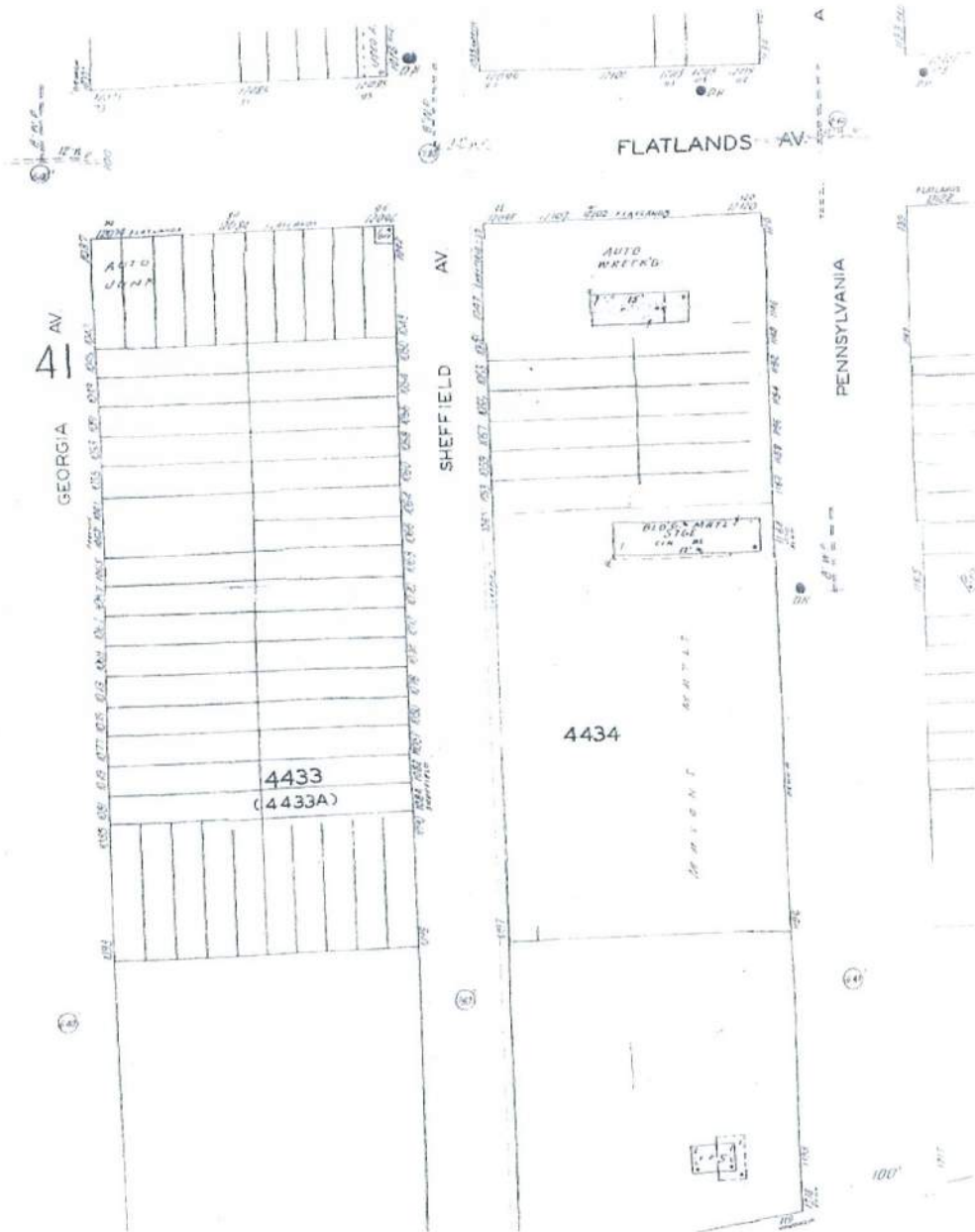


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with Associate



	<b>SOIL MECHANICS</b> <b>ENVIRONMENTAL SERVICES</b> 3770 MERRICK ROAD - SEAFORD, NEW YORK 11783 (516) 221-7500	
	<b>1969 SANBORN MAP</b> <b>LOUISIANA - GEORGIA AVE'S</b> <b>BROOKLYN, NEW YORK</b>	
SCALE: N.T.S.	DATE: 04/08/03	JOB NO.: 03-172



**SOIL MECHANICS**

**ENVIRONMENTAL SERVICES**

3770 MERRICK ROAD - SEAFORD, NEW YORK 11783 (516) 221-7500

**1969 SANBORN MAP  
 GEORGIA - PENNSYLVANIA AVE'S  
 BROOKLYN, NEW YORK**

SCALE:

N.T.S.

DATE:

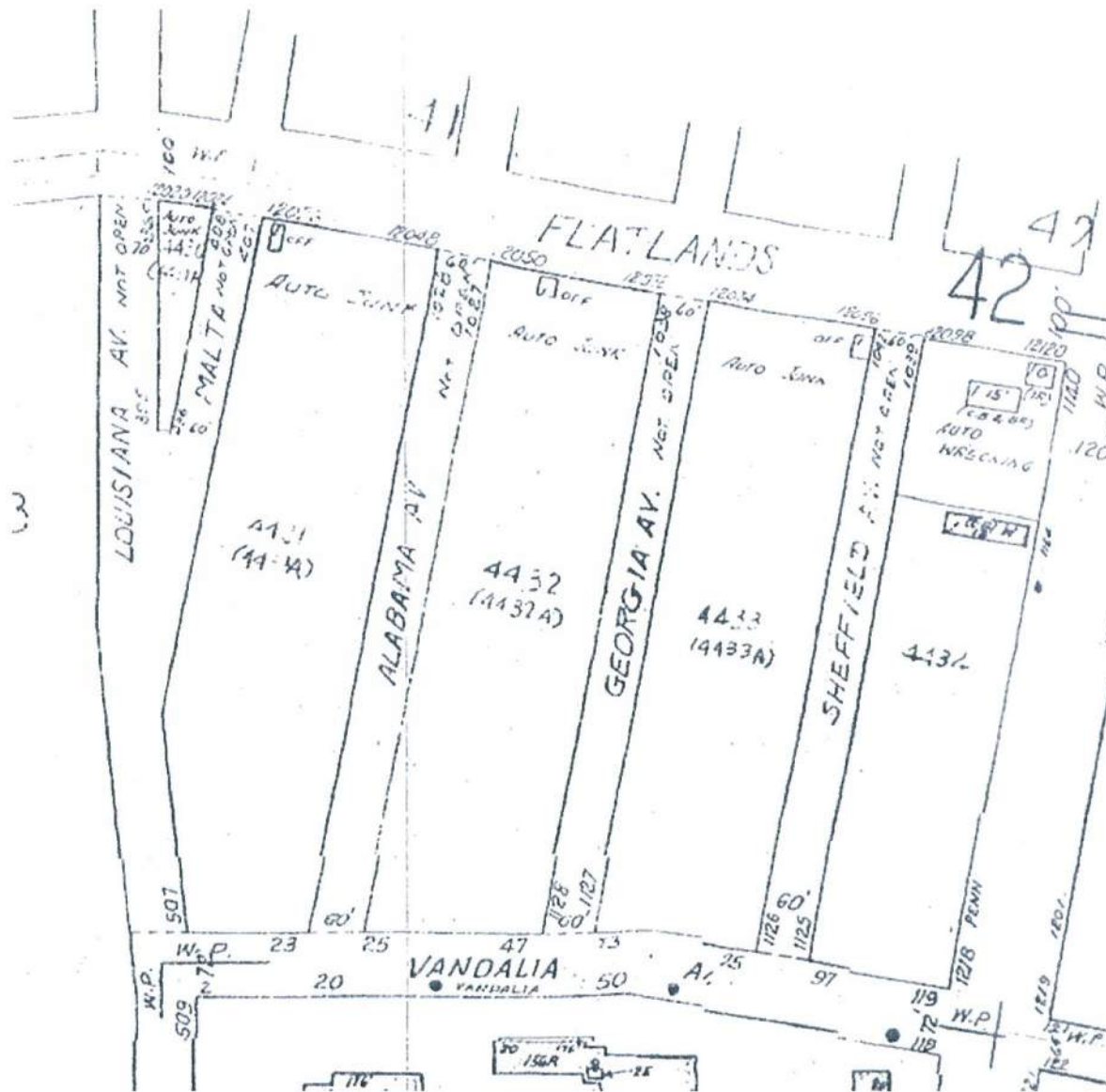
04/08/03

JOB NO.:

03-172





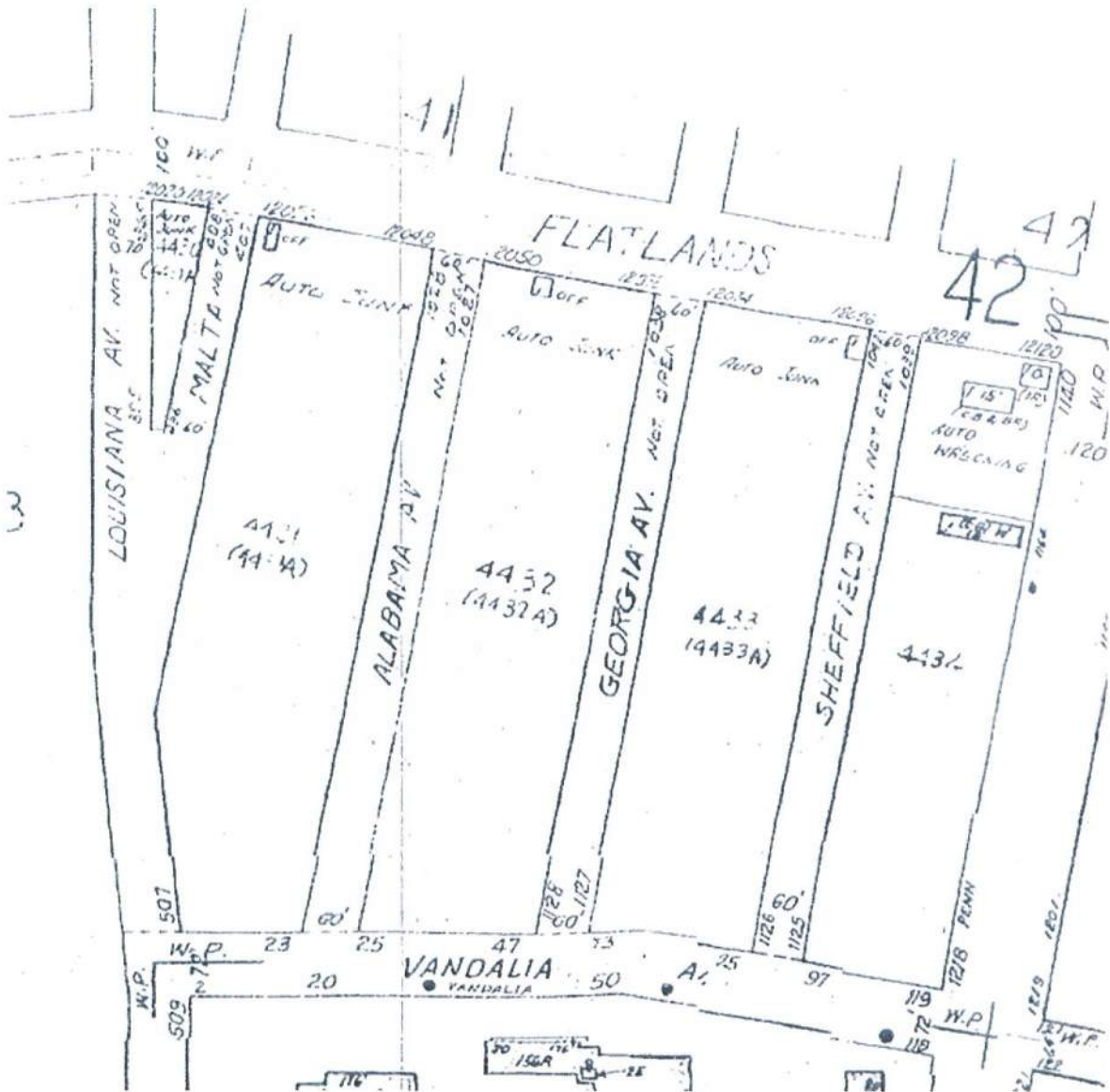


**SOIL MECHANICS  
ENVIRONMENTAL SERVICES**

3770 MERRICK ROAD - SEAFORD, NEW YORK 11783 (516) 221-7500

**1979 SANBORN MAP  
BROOKLYN, NEW YORK**

SCALE: N.T.S.	DATE: 04/08/03	JOB NO.: 03-172
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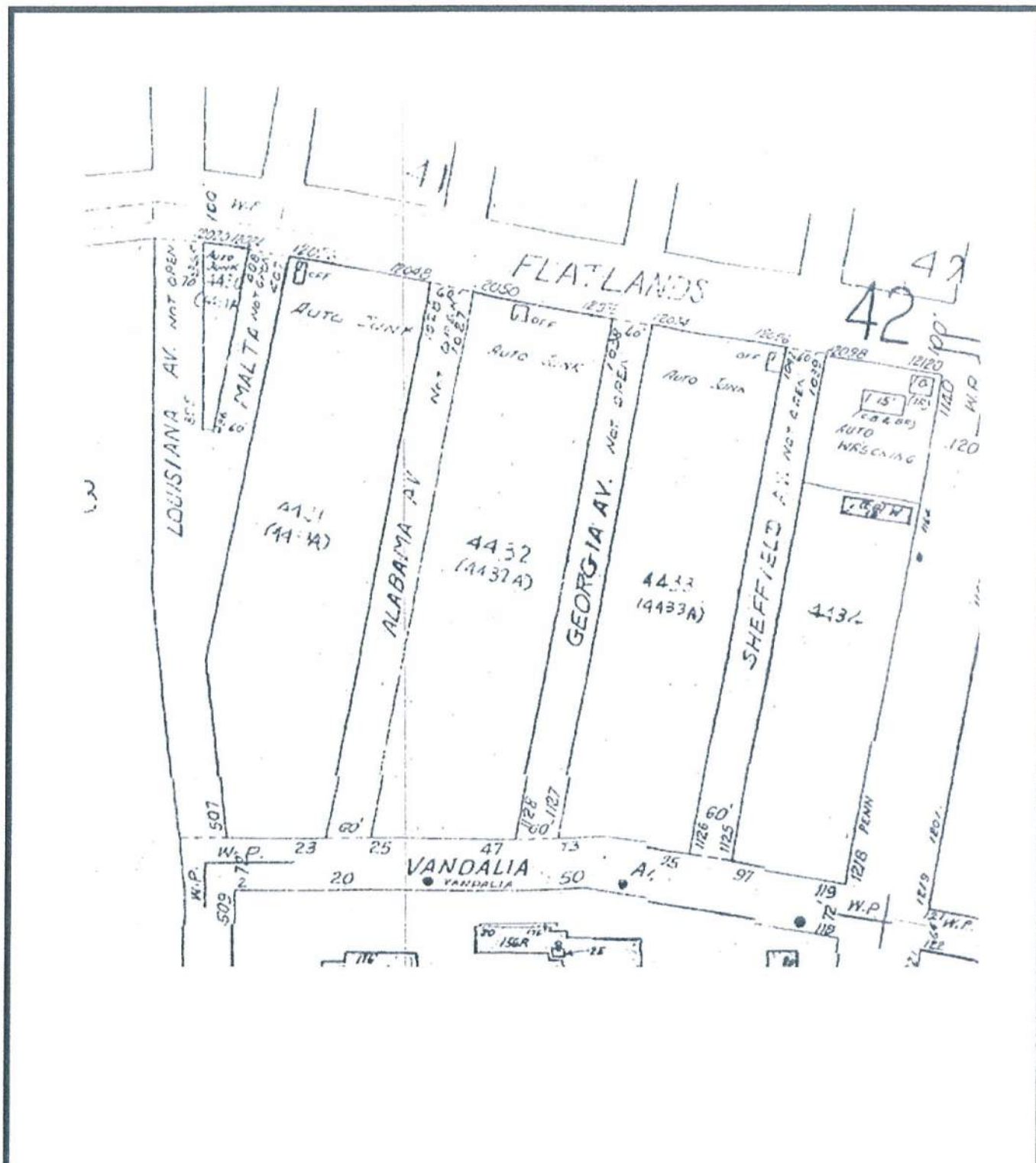
**SOIL MECHANICS**

**ENVIRONMENTAL SERVICES**

3770 MERRICK ROAD - SEAFORD, NEW YORK 11783 (516) 221-7500

**1980 SANBORN MAP  
BROOKLYN, NEW YORK**

SCALE: N.T.S.	DATE: 04/08/03	JOB NO.: 03-172
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**SOIL MECHANICS**

**ENVIRONMENTAL SERVICES**

3770 MERRICK ROAD - SEAFORD, NEW YORK 11783 (516) 221-7500

**1981 SANBORN MAP  
BROOKLYN, NEW YORK**

SCALE:

N.T.S.

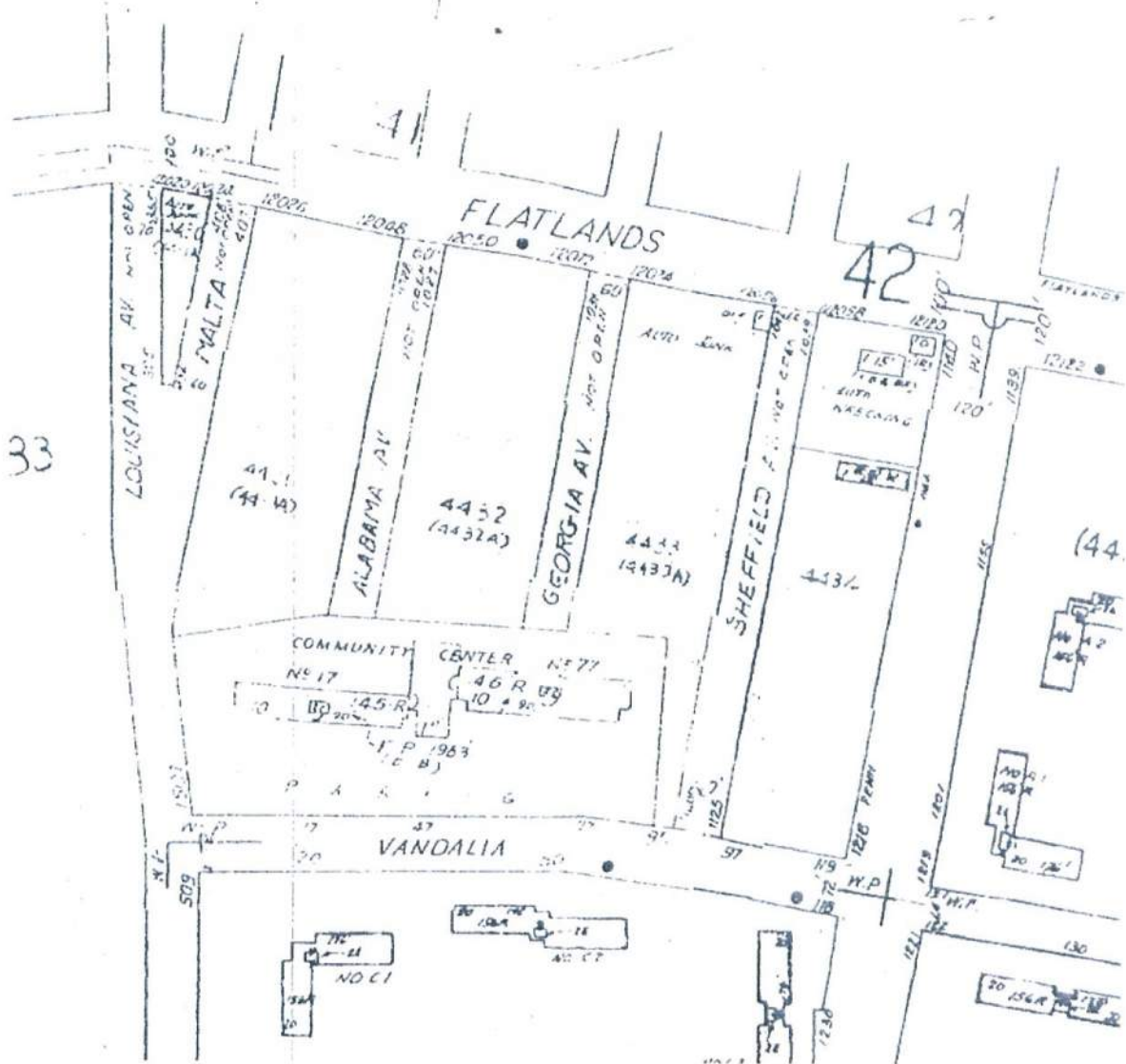
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04/08/03

JOB NO.:

03-172





**SOIL MECHANICS**

**ENVIRONMENTAL SERVICES**

3770 MERRICK ROAD - SEAFORD, NEW YORK 11783 (516) 221-7500

**1983 SANBORN MAP  
BROOKLYN, NEW YORK**

SCALE:

N.T.S.

DATE:

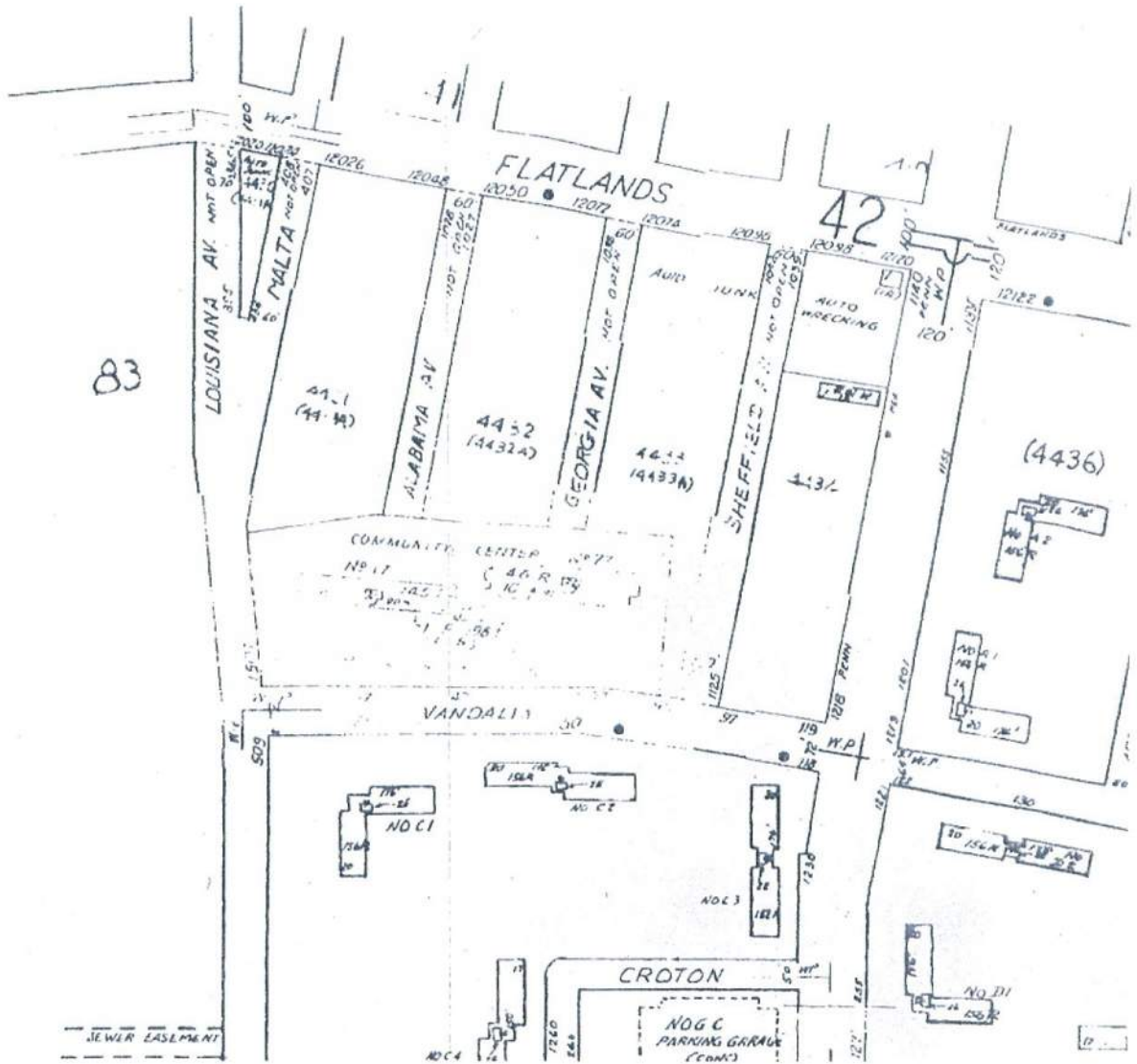
04/08/03

JOB NO.:

03-172







83

42

FLATLANDS

(4436)

44-1  
(44-14)

44-2  
(44324)

44-3  
(4433A)

COMMUNITY CENTER  
NO 17  
NO 18  
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NO 100

VANDALIA

CROTON

NOGC PARKING GARAGE  
(CONC)

SEWER EASEMENT

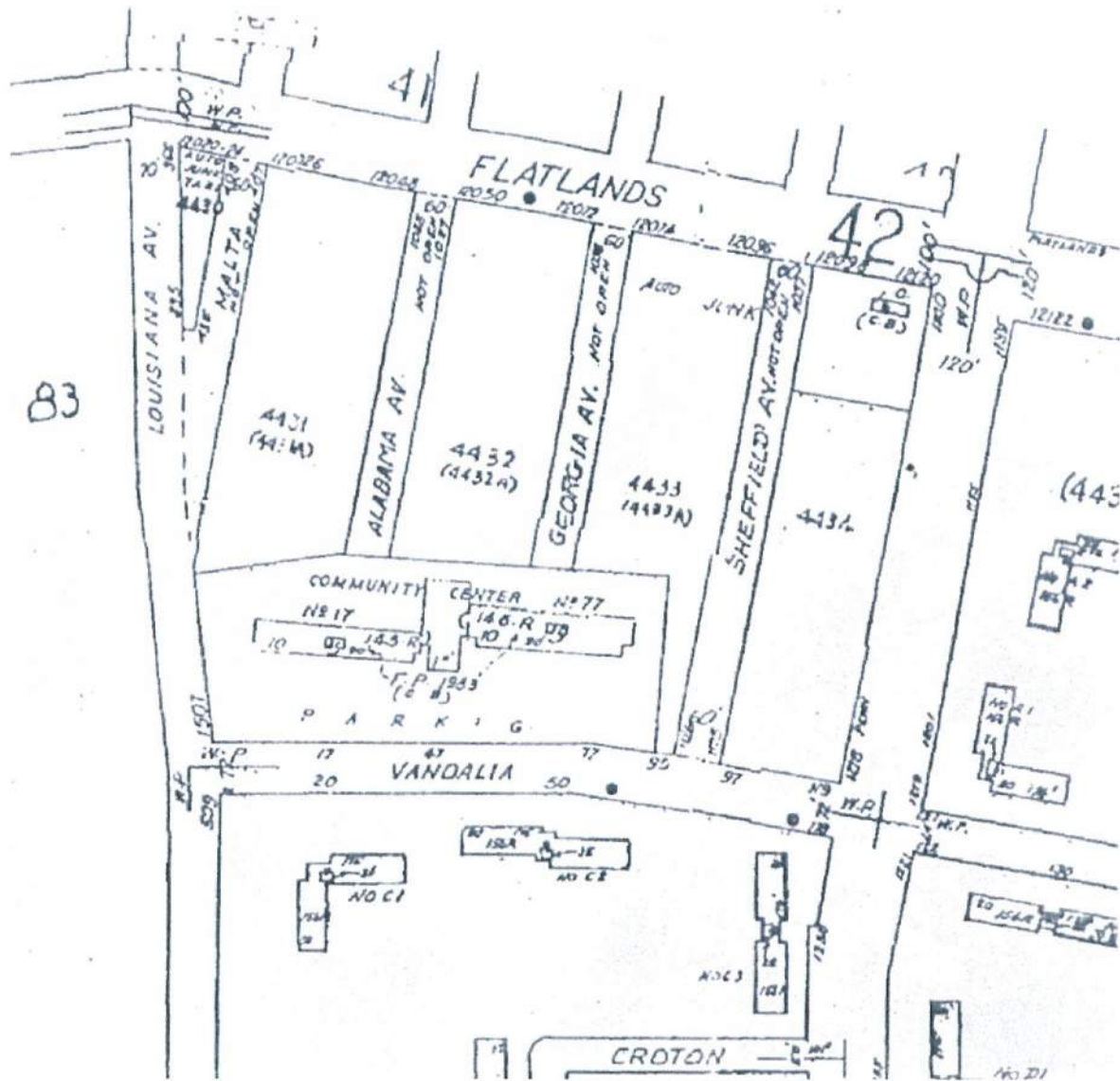


**SOIL MECHANICS  
ENVIRONMENTAL SERVICES**

3770 MERRICK ROAD - SEAFORD, NEW YORK 11783 (516) 221-7500

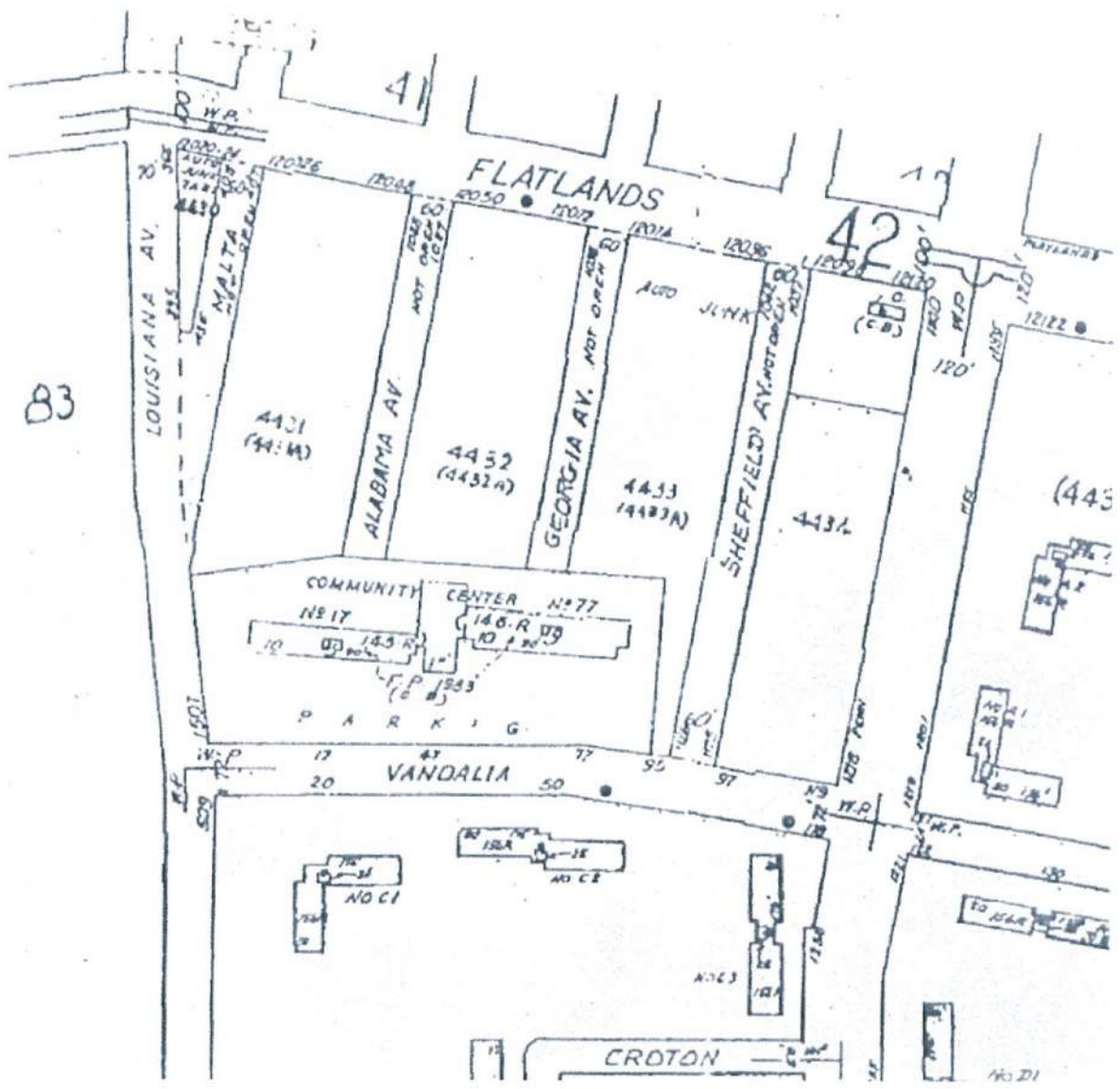
**1987 SANBORN MAP  
BROOKLYN, NEW YORK**

SCALE: N.T.S.	DATE: 04/08/03	JOB NO.: 03-172
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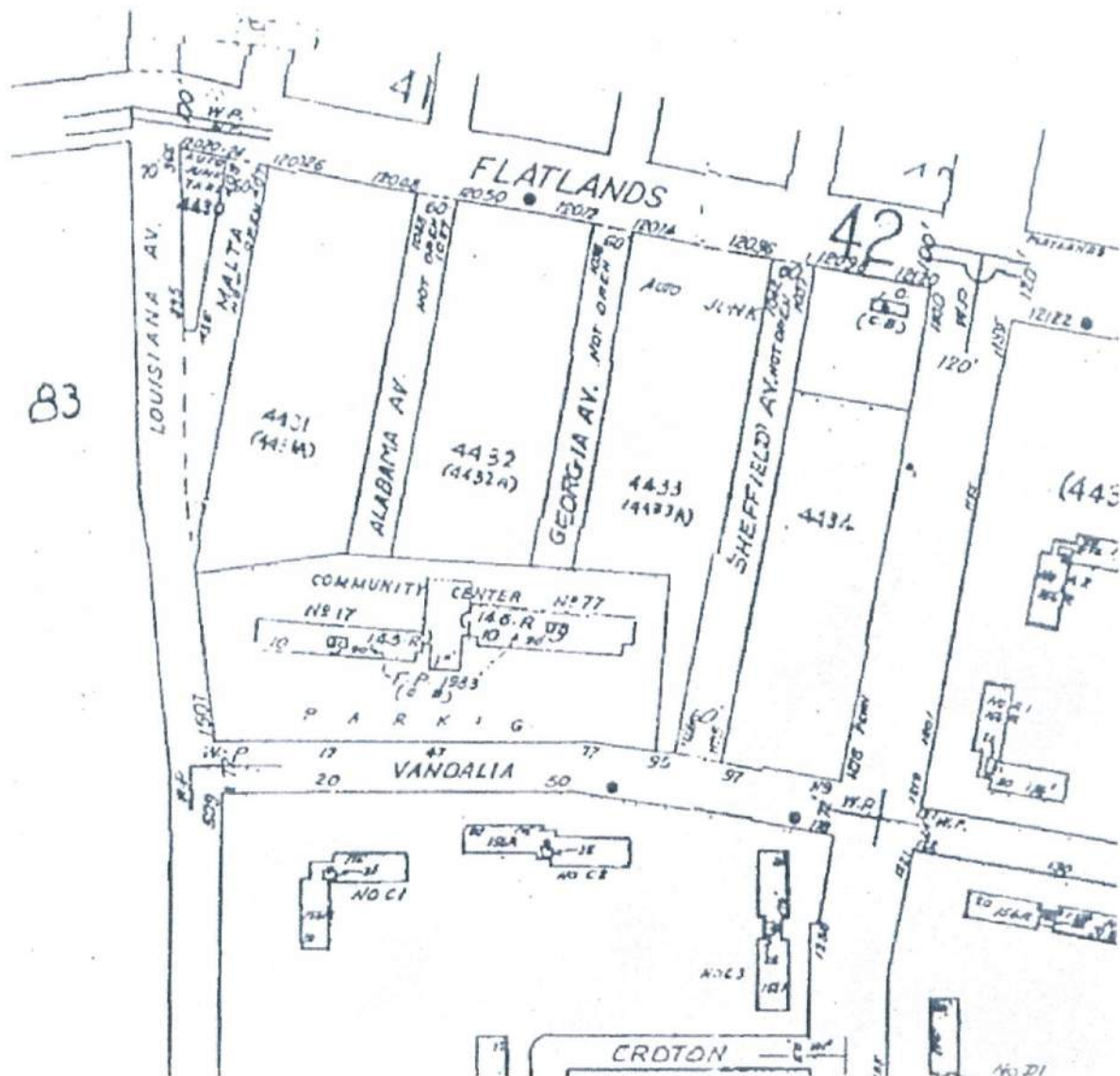
	<b>SOIL MECHANICS</b> <b>ENVIRONMENTAL SERVICES</b> 3770 MERRICK ROAD - SEAFORD, NEW YORK 11783 (516) 221-7500		
	<b>1989 SANBORN MAP</b> <b>BROOKLYN, NEW YORK</b>		
	SCALE:	DATE:	JOB NO.:
N.T.S.	04/08/03	03-172	





	<b>SOIL MECHANICS</b> <b>ENVIRONMENTAL SERVICES</b> 3770 MERRICK ROAD - SEAFORD, NEW YORK 11783 (516) 221-7500	
	<b>1991 SANBORN MAP</b> <b>BROOKLYN, NEW YORK</b>	
SCALE:	DATE:	JOB NO.:
N.T.S.	04/08/03	03-172





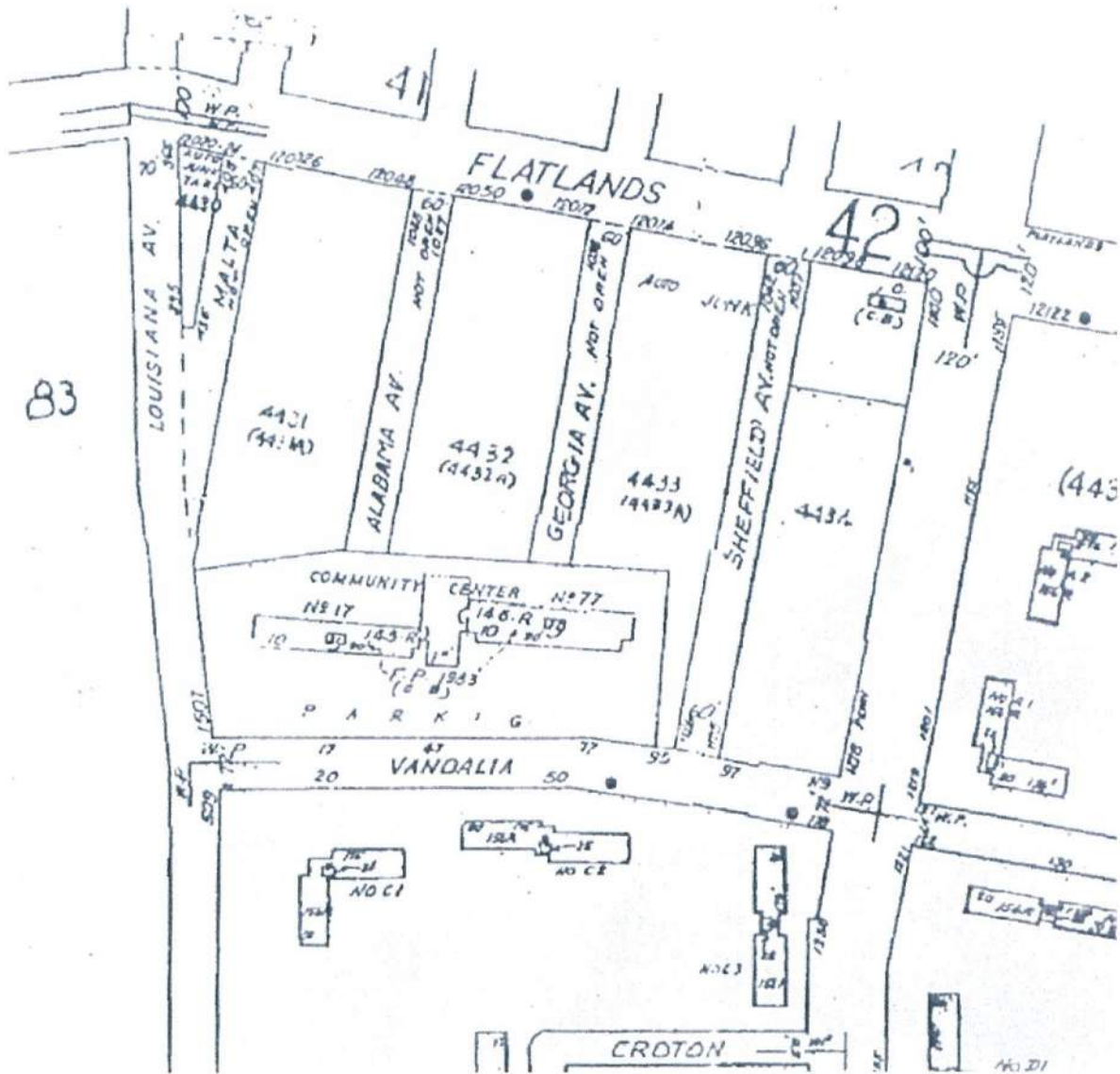
**SOIL MECHANICS**

**ENVIRONMENTAL SERVICES**

3770 MERRICK ROAD - SEAFORD, NEW YORK 11783 (516) 221-7500

**1992 SANBORN MAP  
BROOKLYN, NEW YORK**

SCALE: N.T.S.	DATE: 04/08/03	JOB NO.: 03-172
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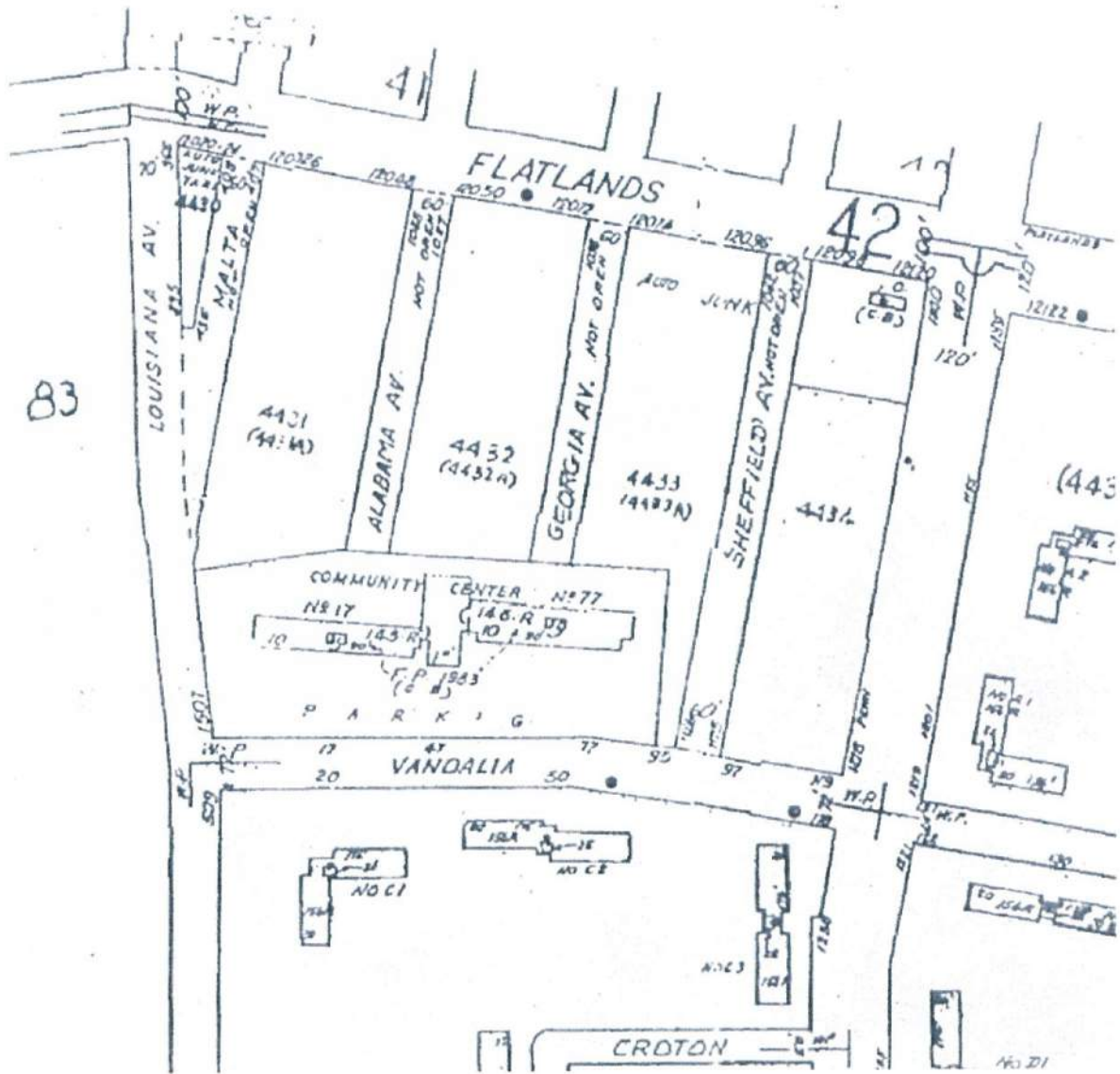
**SOIL MECHANICS**

**ENVIRONMENTAL SERVICES**

3770 MERRICK ROAD - SEAFORD, NEW YORK 11783 (516) 221-7500

**1993 SANBORN MAP  
BROOKLYN, NEW YORK**

			SCALE:	DATE:	JOB NO.:
			N.T.S.	04/08/03	03-172



**SOIL MECHANICS**

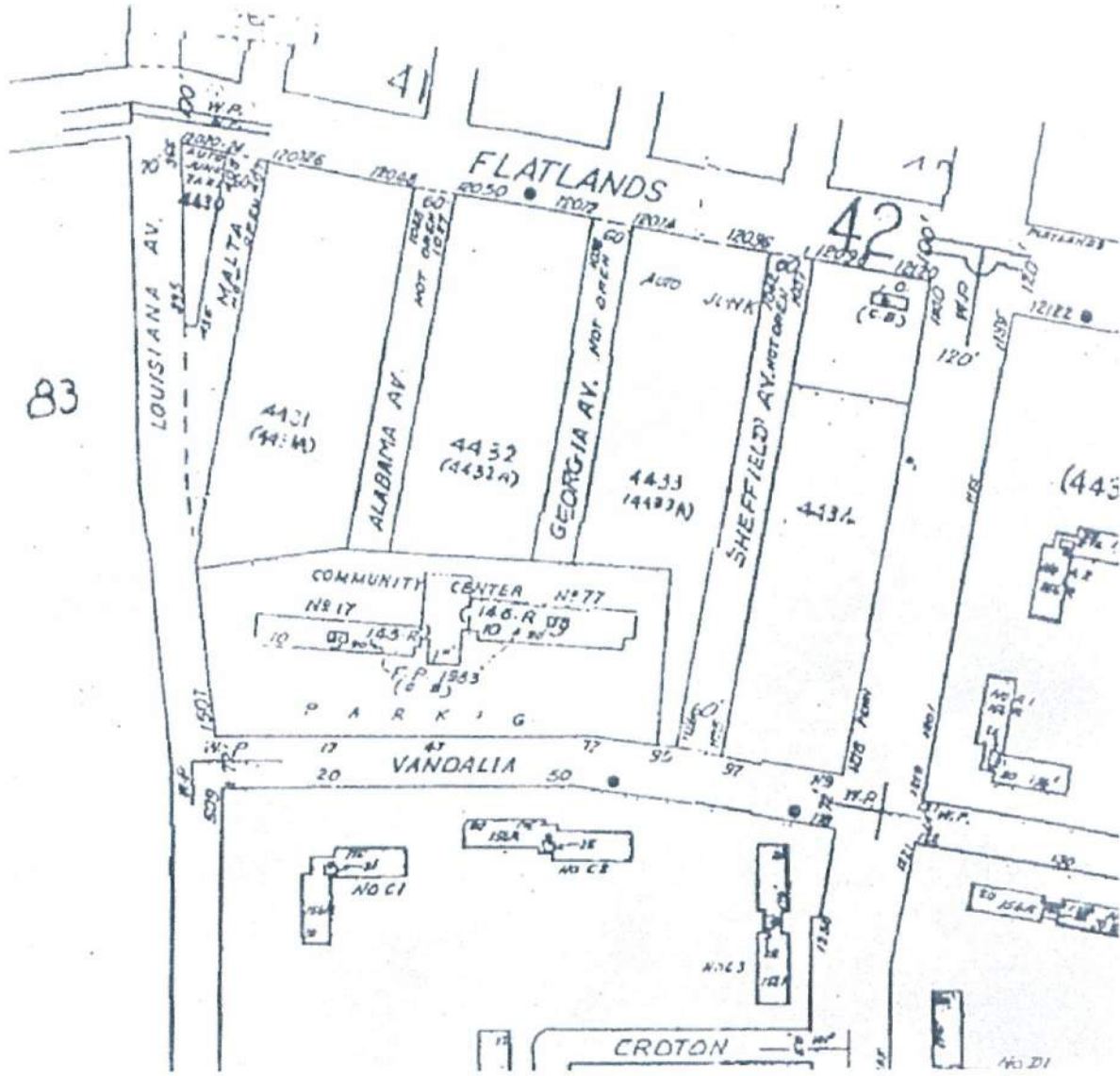
**ENVIRONMENTAL SERVICES**

3770 MERRICK ROAD - SEAFORD, NEW YORK 11783 (516) 221-7500

**1994 SANBORN MAP  
BROOKLYN, NEW YORK**

	SCALE: N.T.S.		DATE: 04/08/03		JOB NO: 03-172	





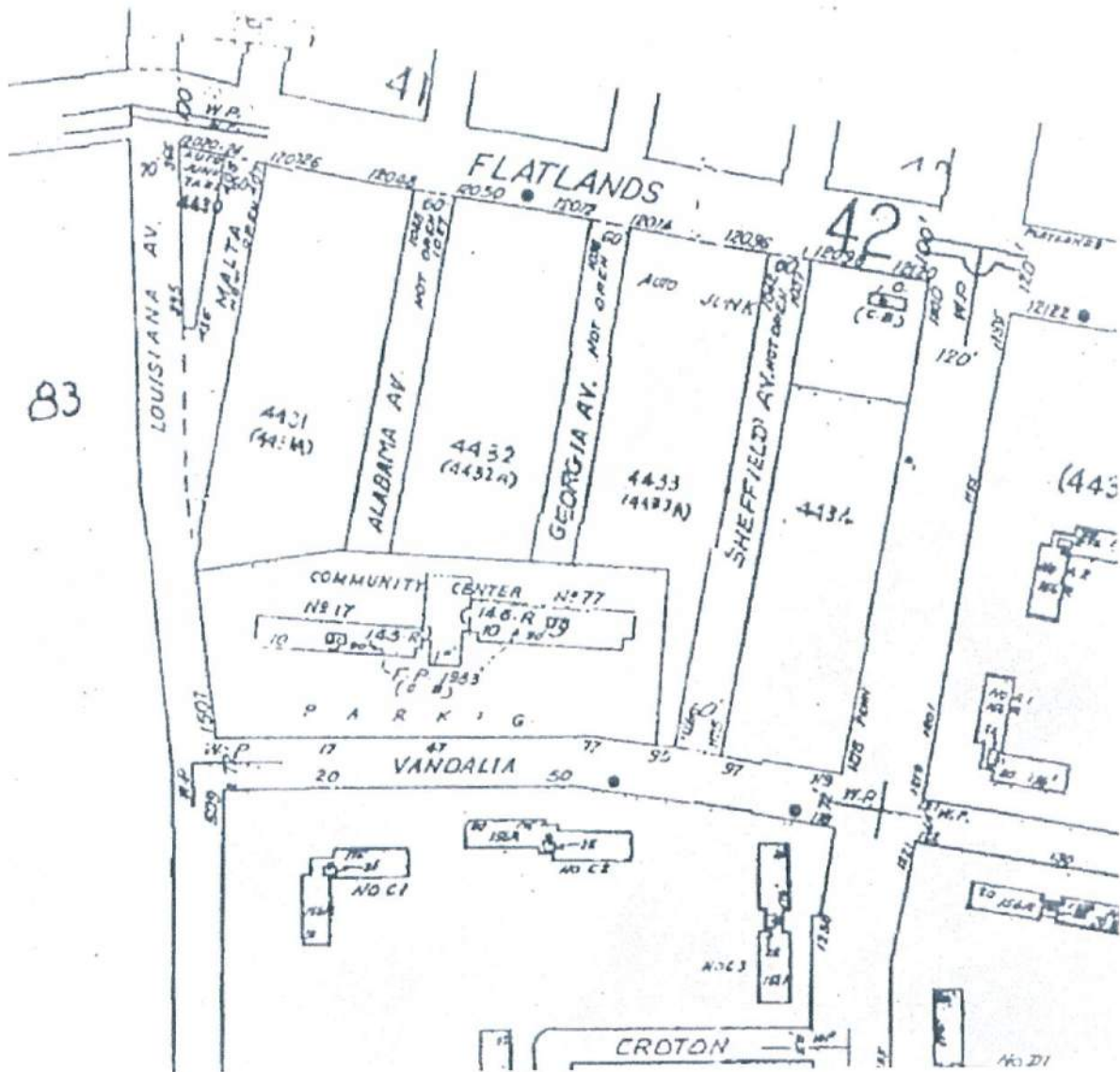
**SOIL MECHANICS**  
**ENVIRONMENTAL SERVICES**  
 3770 MERRICK ROAD - SEAFORD, NEW YORK 11783 (516) 221-7500

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**1995 SANBORN MAP**  
**BROOKLYN, NEW YORK**

SCALE: N.T.S.	DATE: 04/08/03	JOB NO.: 03-172
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**SOIL MECHANICS**

**ENVIRONMENTAL SERVICES**

3770 MERRICK ROAD - SEAFORD, NEW YORK 11783 (516) 221-7500

**1996 SANBORN MAP  
BROOKLYN, NEW YORK**

SCALE: N.T.S.

DATE: 04/08/03

JOB NO.: 03-172