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30 September 1996
BE-1351
No. 19974HVL

Mr. Anthony Murtha
Office of New Rail Construction
New Jersey Transit
One Penn Plaza East, 12th Floor
Newark, New Jersey 07105

**Re: Draft Property Acquisition Environmental Cost Estimating Report - Claremont Assoc.
NJT Waterfront Hudson-Bergen Light Rail Transit System (NJ91CJ0035)**

Dear Mr. Murtha:

BEM Systems, Inc. (BEM) is pleased to submit three copies of the draft Property Acquisition Environmental Cost Estimating (PAECE) report for the 346 Claremont Associates Limited Partnership property which has been prepared utilizing the residential land-use approach as identified in your 2 August 1996 letter.

Please note that the PAECE report is submitted in two sections (PAECE Report and Supporting Documentation) as requested.

Should you have any questions or require additional information regarding this report, please do not hesitate to call me.

Very truly yours,

BEM SYSTEMS, INC.

A handwritten signature in black ink, appearing to read "Hilda V. Lafebre", is written over the typed name.

Hilda V. Lafebre
Project Manager

cc: R. Hernon (NJT-NRC)
J. Higgins (NJT-NRC)
D. Chewey (NJT-NRC)
T. Toskos (BEM)
S. Meersma (BEM)
M. Brady (BEM)

1.0 INTRODUCTION

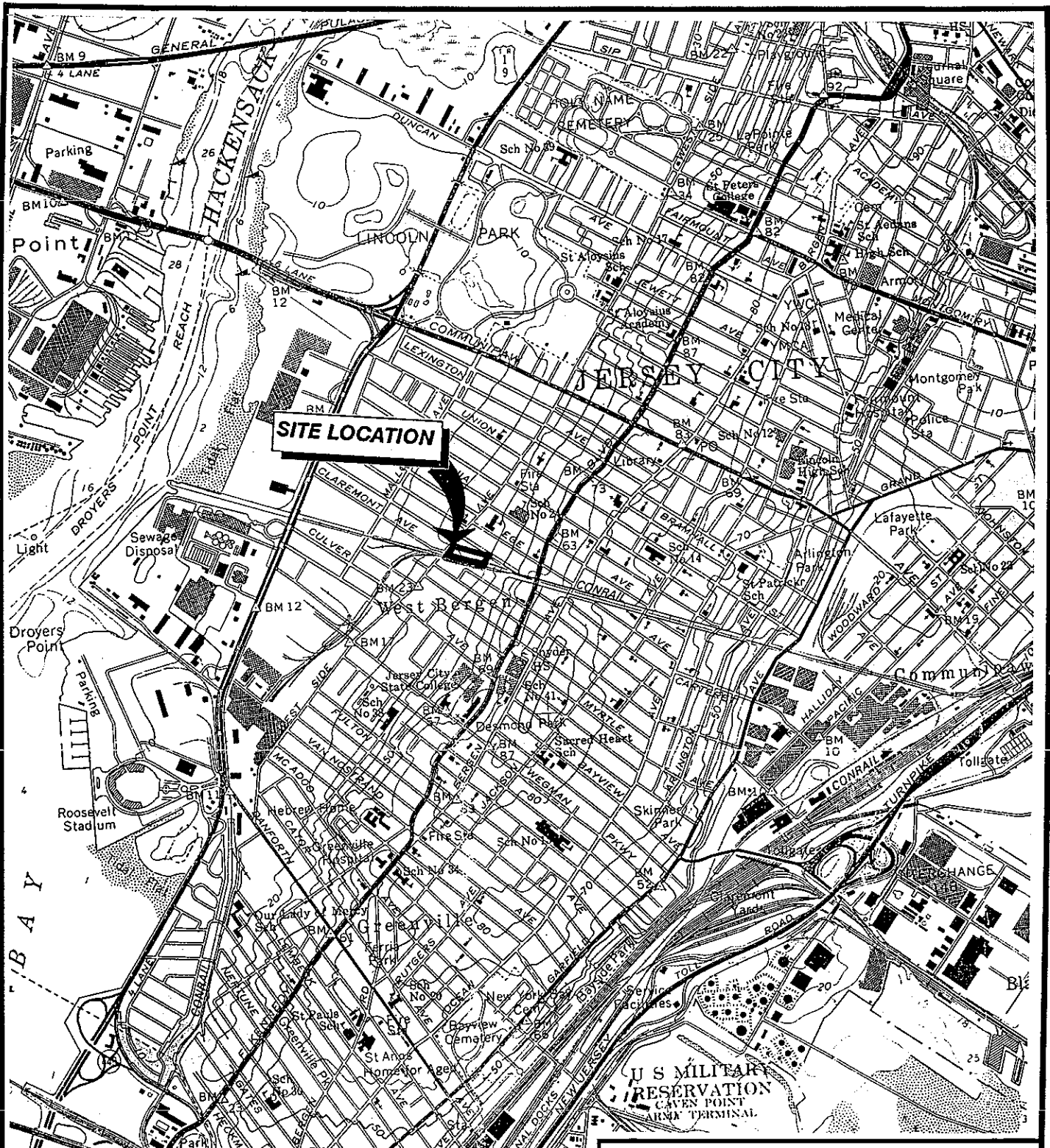
On behalf of the New Jersey Transit Corporation (NJ Transit) - Office of New Rail Construction (NRC), BEM Systems, Inc. (BEM) prepared a Property Acquisition Environmental Cost Estimating (PAECE) report for the 346 Claremont Associates Limited Partnership (Claremont Associates) property, which is one of several properties that may be acquired by NJ Transit as part of their Hudson-Bergen Light Rail Transit System (H-BLRTS) improvement program. Figure 1-1 shows the location of the Claremont Associates property.

This PAECE report is based on the findings of the environmental investigations conducted by BEM along the proposed H-BLRTS corridor. The investigations conducted to-date on the Claremont Associates property are representative of the types of environmental investigations that a purchaser would undertake prior to acquiring real property in the state of New Jersey. This PAECE report also assumes a future residential land-use of the property, consistent with the Jersey City Zoning Ordinance.

The PAECE report has been divided into several sections to assist in the understanding of the criteria which was utilized in the development of this report. Following this introductory section, Section 2.0 presents a description of the property focusing on past, current and anticipated future land-use. The scope and findings of the environmental investigations conducted at the Claremont Associates property are then presented in Section 3.0. Section 4.0 presents an evaluation of remedial alternatives and describes the selected remedial approach. Based on the findings of the environmental investigations and the anticipated future land-use of the property, Section 5.0 presents the costs estimate for implementation of the selected remedial action.

1.1 Background

The NRC is proposing a series of transportation improvements along the H-BLRTS corridor, including construction of a Light Rail Transit (LRT) system and other improvements to the existing public transit system. To assist the NRC in satisfying regulatory requirements and evaluating potential environmental liability, BEM conducted a Preliminary Assessment (PA) along the proposed H-BLRTS corridor including an evaluation of potential soil and groundwater contamination. A Remedial Investigation (RI) was implemented in accordance with a Remedial Investigation Work Plan (RIWP) approved by the New Jersey Department of Environmental Protection (NJDEP), to assess the nature and extent of potential soil and groundwater contamination along the H-BLRTS corridor. The RI consisted of the collection and analysis of soil and groundwater samples. Sampling locations were based primarily on the NJDEP's "Technical Requirements for Site Remediation (TRSR)" (NJAC 7:26E). Data gathered during the PA and RI from the Claremont Associates property were used in the development of this Property Acquisition Environmental Cost Estimating (PAECE) report.



SOURCE :
U.S.G.S. 7.5' Topographic Map
Jersey City Quadrangle, 1967
Photo revised 1981.



N TRANSIT

PROPERTY ACQUISITION ENVIRONMENTAL COST
ESTIMATING REPORT

346 CLAREMONT ASSOCIATES
LIMITED PARTNERSHIP PROPERTY

SITE LOCATION MAP

BEM ENVIRONMENTAL ENGINEERS AND SCIENTISTS
STRASSER, INC. FLORHAM PARK, NJ 07832 (201) 301-0078

PR. No. : BE 1351
DATE: 09/1996
FIGURE NO: 1-1
DWG. No. A-9603-15

1.2 Purpose of Property Acquisition Environmental Cost Estimating Report

The purpose of the PAECE report is to estimate the costs that the property owner would probably incur to remediate the Claremont Associates property to a level acceptable to the NJDEP, if contamination is present. Based on the information specific to the Claremont Associates property generated from the PA and RI, the NJDEP soil cleanup requirements, and the anticipated future land-use of the property as per the Jersey City Zoning Ordinance; a cost-effective and reasonable approach for site remediation of the property was selected from currently available remedial alternatives.

2.0 DESCRIPTION OF THE PROPERTY

The Claremont Associates property block and lot numbers, as recorded on the 1977 tax map of Jersey City (Figure 2-1), and NJ Transit's parcel number assigned to the property are:

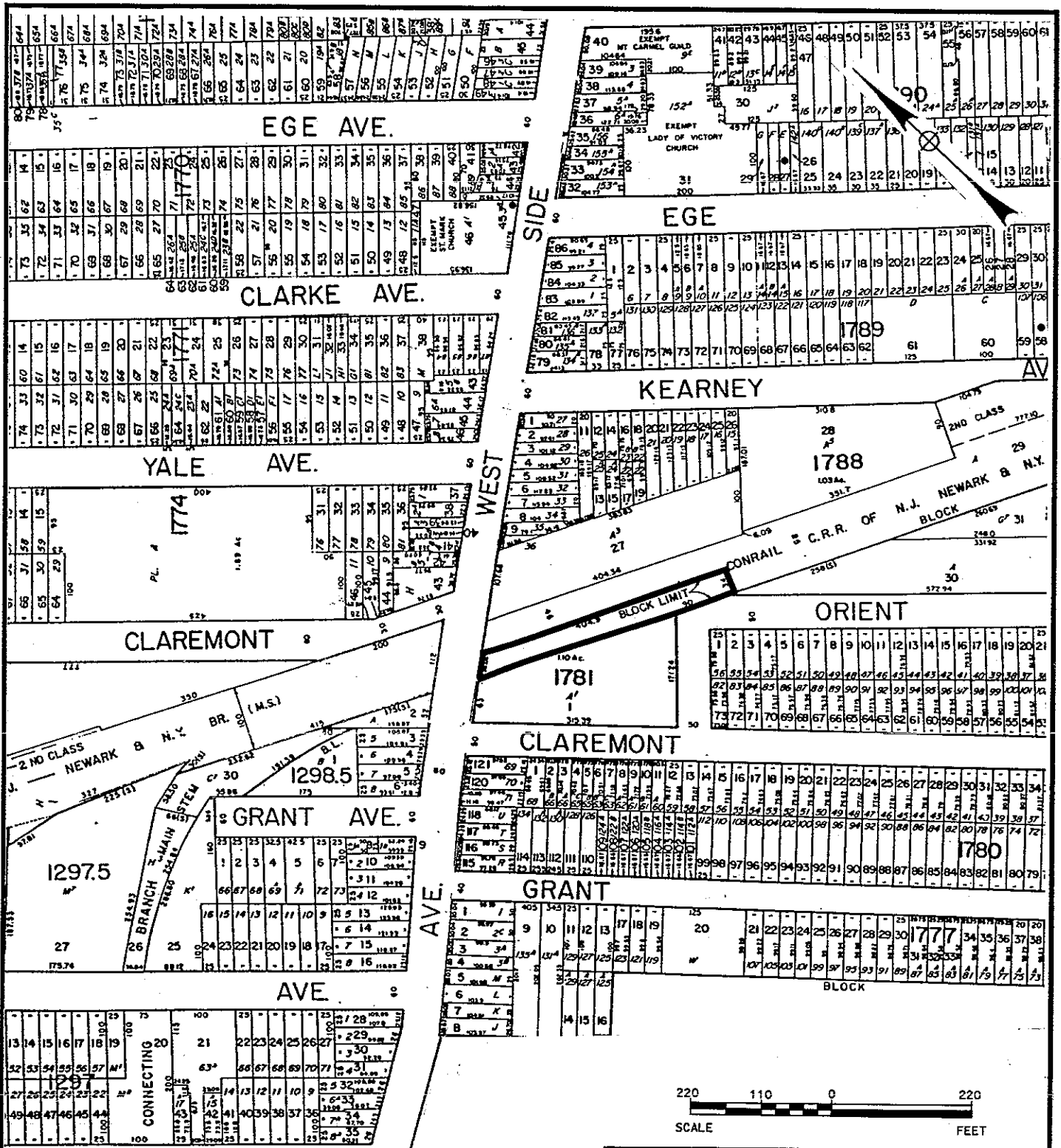
Block	Lot	NJ Transit Parcel Number
1781	A1	76

The Claremont Associates property is located east of West Side Avenue in Jersey City, Hudson County, New Jersey, and is roughly bounded by the Conrail Main Stem to the north, Claremont Avenue to the south, Block 1782, Lots 25 and 82 to the east, and West Side Avenue to the west. The property is improved and contains a total area of 1.10 acres of which 0.30 acres (study area) may be acquired by the NJ Transit for the LRT. Information provided by the NRC indicates that the property is currently owned by Claremont Associates. According to the present zoning of Jersey City, the subject property is zoned R-2 (Low Density Residential).

2.1 Past Site Land-Use

The Claremont Associates property is located in a section of Jersey City which has been historically developed for mixed land-use which included: residential; railroad; commercial; and manufacturing. However, this section of Jersey City has been redeveloped primarily for residential and commercial land-use during the last 30 years.

Historical aerial photographs dated 1947, 1966, 1977 and 1993, the Hopkins Atlas Maps of Hudson County (1908 through 1928), and Sanborn Fire Insurance Maps (1911 through 1954 and 1995) were used to determine past land-use of the property, which may indicate the potential presence of hazardous substances or potential soil and/or groundwater contaminated areas.



BASE MAP SOURCE:
 TAX MAP - JERSEY CITY
 Prepared by: Purcell &
 Taylor, P.C. Caldwell, NJ
 (October 3, 1977)

LEGEND:
 ——— Limit of the Study Area

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PROPERTY ACQUISITION ENVIRONMENTAL COST ESTIMATING REPORT

346 CLAREMONT ASSOCIATES LIMITED PARTNERSHIP PROPERTY (BLOCK 1781, LOT A1)

SITE MAP

BEM ENVIRONMENTAL ENGINEERS AND SCIENTISTS
 SYSTEMS, INC. FLORHAM PARK, NJ 07932 (201) 301-0078

PR. No. : BE 1351
 DATE: 09/1996
 FIGURE NO: 2-1
 DWS. No. A-9603-15

The review of the 1873 Hopkins Atlas Map of Hudson County indicated that the Claremont Associates property was originally unimproved and owned by the Estate of Abram Vreeland. The 1908 Hopkins Atlas Map of Hudson County indicated that the property was occupied by the Greek American Confectionery Company; with part of the property utilized as a coal yard. The Greek American Confectionery Company was subsequently replaced by the Novelty Candy Company. The 1919 Hopkins Atlas Map of Hudson County indicated that the portion of the property which was operated as a the coal yard was now owned by William Canning and Son. The 1928 Hopkins Atlas Map of Hudson County indicated that the property was operated by the Lightolier Company (also known as Corona Lighting Corporation). The 1934 through 1995 Sanborn Fire Insurance Maps indicated that Lightolier Company (Corona Lighting Corporation) continued to utilize the subject property during this time period.

2.2 Current Land-Use

The Claremont Associates property is improved; however, the study area (0.30 acres) which is under consideration for acquisition by NJ Transit is unimproved and does not support any operations which would be considered a specific land-use activity by Jersey City.

2.3 Proposed Future Land-Use

NJ Transit's Real Estate Appraiser has determined the highest and best use of the Claremont Associates property is for residential land-use in accordance with the Zoning Ordinance of Jersey City. The Jersey City Zoning Ordinance for R-2 (Low Density Residential District) zoned properties allows for the development of the property for the following land-use activities:

- Detached Dwelling Units;
- Dwellings with two (2) dwelling units;
- Row Houses;
- Townhouses;
- Garden Apartments;
- Public and Private Schools;
- Parks and Playgrounds;
- Houses of Worship; and
- Governmental uses limited to office, meeting, legislative and judicial functions.

The maximum percentage of a R-2 zoned property which can be covered by a building ranges from 30% for Garden Apartments to 60% for detached and 2-unit dwellings, and does not include the setback distances and off street parking requirements. For purposes of this report, it is assumed that the Claremont Associates property is to be developed with detached and 2-unit dwellings to the maximum building coverage of 60%, as the property owner would most likely realize an increased cost benefit for this construction.

3.0 ENVIRONMENTAL EVALUATION OF THE PROPERTY

An environmental evaluation was conducted for the Claremont Associates property (including the study area) through the implementation of a PA and the H-BLRTS RI sampling program. A PA is the first step in the process to determine whether or not a property is contaminated. The purpose of a PA is to identify the presence of any potential soil and/or groundwater contaminated areas on the property. If potential contaminated areas are identified on the property, soil and/or groundwater investigation activities would be required by the NJDEP. The NJDEP requires that properties which contain contaminant concentrations greater than the Residential Direct Contact Soil Cleanup Criteria (RDCSCC) or greater than Groundwater Quality Standards (GQS) and/or the Practical Quantitation Levels (PQLs) be remediated through the physical removal of all contamination, unless specific institutional and/or engineering controls are utilized as part of the selected remedial action.

The H-BLRTS RI sampling program was implemented to evaluate whether contaminant concentrations exist on properties along the H-BLRTS corridor that are greater than the Residential Direct Contact Soil Cleanup Criteria (RDCSCC), the Non-Residential Direct Contact Soil Cleanup Criteria (NRDCSCC), Impact to Groundwater Soil Cleanup Criteria (IGSCC), the Groundwater Quality Standards (GQS) and/or the Practical Quantitation Levels (PQLs). The results of these evaluations and the anticipated future land-use of the properties can then be used to identify the most cost-effective and reasonable remedial action necessary to remediate the properties (if contamination is present) to a level acceptable to the NJDEP. The scope and the findings of the PA and RI specific to the Claremont Associates property are presented below.

3.1 Environmental Background File and Data Review

BEM conducted an environmental background file and data review for the Claremont Associates property (including the study area) to determine whether it is listed as a potential area of environmental concern. This consisted of a review of available NJDEP and federal files, including the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS), Emergency Response Notification System (ERNS), Facility Index System (FINDS), Resource Conservation and Recovery Act (RCRA) Notifier, National Priority List (NPL), the NJDEP's list of properties currently undergoing investigation (Known Contaminated Sites List) and/or remediation under the NJDEP's Site Remediation Program, or Hazardous Waste Management Program (Comprehensive Site List). In addition, BEM reviewed the NJDEP Hudson County Chromate Waste Sites Listing, and the Registered and Leaking Underground Storage Tank (RUST/LUST) reports.

Based upon the records review, the property (including the study area) is listed as a known area of environmental concern. Specifically, the NJDEP's Comprehensive Site List (Site Remediation Program) for Jersey City indicated that Block 1781, Lot A1 was located within an area identified

under the name of Corona Lighting Corporation (as discussed above). The Corona Lighting Corporation (346 Claremont Avenue) site consists of an area bounded by the Conrail Main Stem to the north, Claremont Avenue to the south, Halstead Street to the east, and West Side Avenue to the west. Corona Lighting Corporation was primarily engaged in the manufacturing of lighting fixtures through the shaping of sheet metal which was then formed in the fabrication shop. Corona Lighting Corporation was also identified by the NJDEP as a generator of hazardous waste (trichlorethylene and methylene chloride were stored on-site in 55-gallon drums). In addition, parts degreasing operations were conducted on the subject property.

The NJDEP files indicated that a Site Investigation (SI) and Remedial Investigation (RI) were conducted on the Corona Lighting Corporation site under the direction of the Bureau of Environmental Evaluation, Cleanup and Responsibility Assessment (BEECRA), which assigned Case Number 84322 to this site. These investigations were conducted due to the report of a failed tank tightness test performed on a 15,000-gallon fuel oil underground storage tank (UST) which was located (not within the study area) on the east side of the main site building (west of Halstead Street). The fuel oil UST was located within an underground tank vault which was outside the study area.

The NJDEP files indicated that three soil borings (during the SI) and nine soil borings (during the RI) were installed surrounding the underground tank vault (not within the study area); and three soil samples were collected from each boring for laboratory analysis. The laboratory analytical data indicated that the subsurface soil between the main site building and Halstead Street were contaminated with concentrations of total petroleum hydrocarbons (TPHCs) above the former NJDEP cleanup criteria of 100 milligram per kilogram (mg/kg). Based upon the results of the SI and RI, approximately 100 cubic yards of contaminated soil were excavated during the subsequent Remedial Action (RA) activities and were transported to an approved disposal facility.

The files indicated that the NJDEP issued a "Negative Declaration" letter to Corona Lighting Corporation on 21 October 1988 concerning the environmental issues related to the contaminated soil associated with the 15,000-gallon fuel oil UST. Therefore, the NJDEP closed the Corona Lighting Corporation case.

The records review indicate that the Claremont Associates property was listed as a known area of environmental concern and has been used for commercial/manufacturing land-use during the past 80 years; therefore, a sampling program was conducted to assess the nature and extent of potential contamination on the property. Based primarily on the size of the Claremont Associates (study area) property (0.30 acres) and potential historical on-site contamination sources, two soil borings and two hand augers were installed and sampled to assess the nature and extent of potential contamination within the study area.

3.2 Laboratory Analytical Program

Laboratory analytical methods and parameters for soil samples collected within the study area are listed below. In addition, the name of the environmental laboratory contracted to analyze the samples is also provided below. This laboratory is qualified to conduct analyses using the USEPA Contract Laboratory Program (CLP) Statement of Work (SOW).

Laboratory Name	NJ Laboratory Certification Number	Matrix	Analytical Parameter	Analytical Methodology
Accutest	12129	Soil	TCL BNA + 20 Cyanide TPHC Hexavalent Chromium TAL Metals TCL Pesticide/PCB/Herbicides TCL VOC + 10	USEPA CLP SOW USEPA CLP SOW USEPA Method 418.1 (Modified for soils) NJDEP Modified USEPA 3060/7196A USEPA CLP SOW USEPA CLP SOW USEPA CLP SOW

USEPA - United States Environmental Protection Agency

SOW - Statement of Work for Organics Analysis Doc. No. OLM01.0 (and revisions)
 or Inorganics Analysis Doc. No. ILM02.0 (and revisions)

BNA + 20 - Base/Neutral/and Acid Extractable Organic Compounds plus 20 additional highest peaks

VOC + 10 - Volatile Organic Compounds plus 10 additional highest peaks

TPHC - Total Petroleum Hydrocarbons

PCB - Polychlorinated Biphenyls

TAL - Target Analyte List

TCL - Target Compound List

3.3 Summary and Results of Sampling Program

The table below presents information on the two soil borings and two hand augers installed on the study area, including the sample identification number/location, depth intervals and number of samples collected for laboratory analysis.

Soil Sample Identification Number/Location	Number of Soil Samples Collected	Depth Intervals
G3-B49	2	2.0'-3.5' and 4.0'-4.5'
G3-B50	2	2.0'-3.5' and 4.0'-4.5'
G3-B58	1	0.0'-1.5'
G3-B59	1	0.0'-1.5'

All 6 samples collected from the study area were submitted for laboratory analysis.

The soil sample analytical results were compared to the NRDCSCC for the samples collected in the 0.0 to 1.5-foot interval below ground surface and IGSCC for the samples collected greater than 2.0 feet below the ground the surface. Metal sample results (regardless of the depth interval) are only

compared to NRDCSCC, as the NJDEP has not established impact to groundwater soil cleanup criteria for metals. The soil sample analytical results were compared only to the NRDCSCC in the 0.0 to 1.5-foot interval because soil contaminant concentrations above the RDCSCC and below the NRDCSCC will not be physically removed for this evaluation, but will be addressed through institutional and/or engineering control measures.

The table below presents the sample identification number/location, depth intervals and parameters that exceed the NRDCSCC.

Soil Sample Identification Number/Location	Depth Interval	Parameters which exceed the NJDEP NRDCSCC
G3-B58	0.0'-1.5'	Arsenic, Benzo(a)pyrene, Dibenz(a,h)anthracene, Hexavalent Chromium, Lead, Total Chromium and Zinc
G3-B59	0.0'-1.5'	Benzo(a)pyrene

The soil samples with contaminant concentrations exceeding NRDCSCC and depth intervals are presented on Figure 3-1 (Sampling Locations and Contaminant Distribution Map) and in Appendix A (Property Acquisition Environmental Cost Estimating Fact Sheet and Laboratory Analytical Results).

Soil	G3-B58A	(0.0-1.5')	28-Feb-96
Analyte	Concentration		NJDEP Criteria
Arsenic	21.2	mg/kg	20 mg/kg
Benzo(a)pyrene	8.6	mg/kg	0.66 mg/kg
Chromium	711	mg/kg	500 mg/kg
Chromium (VI)	17	NJ mg/kg	10 mg/kg
Dibenz(a,h)anthracene	1.3	mg/kg	0.66 mg/kg
Lead	2120	mg/kg	600 mg/kg
Zinc	2620	mg/kg	1500 mg/kg

Soil	G3-B59A	(0.0-1.5')	28-Feb-96
Analyte	Concentration		NJDEP Criteria
Benzo(a)pyrene	1	mg/kg	0.66 mg/kg

LEGEND :

- G3-B50 SOIL BORING
- LIMIT OF THE STUDY AREA
- ▨ LIMITS OF INTERPOLATED "PAH" HOT SPOT AREA
- ▩ LIMITS OF INTERPOLATED "CHROMIUM (VI)/PAH" HOT SPOT AREA

NOTES :

- 1.- Contaminant concentrations shown are those which exceed: NJDEP Non-Residential Direct Contact Soil Cleanup Criteria (February 1994) and Impact to Groundwater Soil Cleanup Criteria (February 1994).
- 2.- Concentration qualifiers are explained in Appendix A.
- 3.- Sample Locations are in State Planar Coordinate System NAD83 and Elevations are in feet, MSL.

SAMPLE PT	NORTHING	EASTING	ELEVATION
G3-B49	685466.30	606458.57	N/A
G3-B50	685463.20	606457.48	N/A
G3-B58	685417.20	606643.40	N/A
G3-B59	685414.44	606642.40	N/A

BASE MAP SOURCE :
Parsons Brinckerhoff
Quade & Douglas, Inc. (1995)

GRAPHIC SCALE

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PROPERTY ACQUISITION ENVIRONMENTAL COST ESTIMATING REPORT

346 CLAREMONT ASSOCIATES
LIMITED PARTNERSHIP PROPERTY
BLOCK 1781, LOT A1

SAMPLING LOCATIONS AND CONTAMINANT DISTRIBUTION MAP

BEM ENVIRONMENTAL ENGINEERS AND SCIENTISTS
SYSTEMS, INC. FLORENCE PARK, NJ 07932 (201) 331-0078

PR. No. : BE 1351
DATE: 9/1996
FIGURE NO: 3-1
DWG NO. : A-9602-44