

United States Department of the Interior
National Park Service

National Register of Historic Places
Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer to complete all items.

1. Name of Property

historic name Central IND Substation
other name/site number _____

2. Location

street & number 126 West 53rd Street [] -not for publication
city or town New York [] vicinity
state New York code NY county New York code 061 zip code 10019

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements as set forth in 36 CFR Part 60. In my opinion, the property meets does not meet the National Register criteria. I recommend that this property be considered significant nationally statewide locally. ([] See continuation sheet for additional comments.)

[Signature] SNPO 9/19/05
Signature of certifying official/Title Date

State or Federal agency and bureau

In my opinion, the property meets does not meet the National Register criteria. ([] See continuation sheet for additional comments.)

Signature of certifying official/Title Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is:	Signature of the Keeper	Date of Action
<input type="checkbox"/> entered in the National Register [] see continuation sheet	_____	_____
<input type="checkbox"/> determined eligible for the National Register [] see continuation sheet	_____	_____
<input type="checkbox"/> determined not eligible for the National Register	_____	_____
<input type="checkbox"/> removed from the National Register	_____	_____
<input type="checkbox"/> other (explain) _____	_____	_____

Central IND Substation

New York County, New York

Name of Property

County and State

5. Classification

Ownership of Property (check as many boxes as apply)	Category of Property (check only one box)	Number of Resources within Property (Do not include previously listed resources in the count)		
		Contributing	Noncontributing	
<input type="checkbox"/> private	<input type="checkbox"/> building (s)	_____	_____	Buildings
<input type="checkbox"/> public-local	<input type="checkbox"/> district	_____	_____	Sites
<input checked="" type="checkbox"/> public-State	<input type="checkbox"/> site	_____	_____	Structures
<input type="checkbox"/> public-Federal	<input checked="" type="checkbox"/> structure	_____	_____	Objects
	<input type="checkbox"/> object	_____	_____	TOTAL
		1	0	
		1	0	

Name of related multiple property listing

(Enter "N/A" if property is not part of a multiple property listing)

Historic Resources of the New York
City Subway System

**Number of contributing resources
previously listed in the National Register**

0

6. Function or Use

Historic Functions

(Enter categories from instructions)

Transportation/rail-related

Government/public works

Current Functions

(Enter categories from instructions)

Transportation/rail-related

Government/public works

7. Description

Architectural Classification

(Enter categories from instructions)

Modern Movement/

Art Deco

Materials

(Enter categories from instructions)

Foundation Concrete

Walls Brick, concrete

Roof Steel, concrete

Other Decorative finishes: brick, limestone

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets)

See continuation sheet

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National Register of Historic Places
Continuation Sheet

Section 7 Page 1

Central IND Substation
Name of Property
New York County, NY
County and State

7. Narrative Description

The Central IND Substation is located at 126 West 53rd Street between 6th and 7th Avenues in midtown Manhattan. The substation was completed 1932 to serve the B, D and E trains of the IND system. The original substation is arranged in a north-south direction at the center of a block and measures approximately 100 feet in length and 50 feet in width.

General Characteristics and Construction Methods

The construction of IND Substations in the early 1930s marked the end of the manually operated substation. All but five of the 75-plus stations built for the IND system used mercury arc rectifiers in place of the manually operated rotary converters (Payne, 48). These rectifiers functioned by placing a mercury electrode in contact with mercury vapor – a process that resulted in the current being conducted in only one direction. The most conspicuous change seen in the design of the IND substations was the lack of windows and as a result natural light. The majority of the IND substations built after 1932 were smaller underground vaults that used a single mercury arc rectifier. The smaller type of station allowed the power to be more evenly spaced along the line.

The above ground IND substations were constructed in a simple Art Deco style. Brick facades featured ornamental limestone and aluminum doors embossed with geometric and sunburst patterns (Payne, 49). One consistent element found throughout the IND stations is the ornamental limestone door surround carved with zig zag designs and topped by a tall inscribed lintel that reads, "CITY of NEW YORK" and lists the substation name. At this station the lintel is crowned by a tall, vertical projection.

Exterior Description

The Central IND Substation is contained in a five-story masonry building designed in the Art Deco style, located on an infill lot in midtown Manhattan (Photo 1). Above the 3-foot granite base, the façade has buff-colored bricks in vertical planes projecting one-half brick course. The top edge of the façade is crowned by a wide limestone band in low relief that steps down into the brick below and is crenellated along the top edge (Photo 2). To the east is the substation's monumental portal with a massive limestone frame, carved with Art Deco motifs and name plate (Photo 3). The aluminum-clad doors (with a human-scale passage in one) have an embossed geometric design in low relief. To the west are two additional paired portals with a similar limestone enframing. The eastern

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Central IND Substation
Name of Property
New York County, NY
County and State

portal provides a garage entrance for the substation (at the far west side). The western portal is a recessed entrance vestibule that is open to the sidewalk and faced with brick in a basketweave pattern and a limestone surround (Photo 4) with projecting plinths. This entrance contains an original metal railed entry to the subway (no longer accessible) and an entry to the interior elevator lobby of the building (Photo 5). Windows above are original steel sash with horizontal pivot operation. A single louvered opening has been punched into the brick at the height of the fourth floor.

Side walls are constructed of common brick with no fenestration except for the light wells that have been cut into the east and west elevations. The rear elevation has windows on the third, fourth, and fifth floors only.

Interior Description

The interior of this station is a large street-level windowless volume with painted brick walls and a concrete slab floor and ceiling (Photo 6). Two solid state rectifiers (soon to be joined by a third) have replaced the four original automatic rotary converters. The openings in the slab floor have been covered with plywood. This space is used to house Transit Authority vehicles. The overhead electric crane remains intact on its massive steel girder track.

There is a fresh air intake plenum from a louvered wall penthouse four stories above, which feeds a metal duct that runs along the back wall of the main space to the basement. There is also a similar but smaller duct that exhausts the battery storage room in the basement from a wind-driven vent on the roof. The opening of the entry doors provides for exhaust and additional fresh air intake.

A spiral staircase leads to the basement in the northeast corner (Photo 7). Some original equipment remains in the basement including feeder breaker panels (Photos 8 and 9).

Systems Operations was located on the fourth floor of this building from 1932 to 1994. Systems Operations contained a semi-circular control board, with individual relays in the back, each corresponding to all of the rotary converters in the IND System. The control board was dismantled in 1994 and the central portion was given to the transit museum. The room itself is finished with vinyl tile on concrete floor, gypsum board walls, acoustical tile ceiling, and lighting which reflects its 1960s renovation.

Central IND Substation

New York County, New York

Name of Property

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8. Statement of Significance

Applicable National Register Criteria

(Mark "X" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A** Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B** Property is associated with the lives of persons significant in our past.
- C** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D** Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all boxes that apply.)

Property is:

- A** owned by a religious institution or used for religious purposes.
- B** removed from its original location.
- C** a birthplace or grave.
- D** a cemetery.
- E** a reconstructed building, object, or structure.
- F** a commemorative property.
- G** less than 50 years of age or achieved significance within the past 50 years.

Areas of Significance

(Enter categories from instructions)

- Transportation
- Architecture
- Engineering
- Community Planning and Development

Period of Significance

1932

Significant Dates

1932

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

Bibliography

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey

- recorded by Historic American Engineering Record

Primary location of additional data:

- State Historic Preservation Office
- Other State agency
- Federal Agency
- Local Government
- University
- Repository name: _____
NYC Transit Archives
- NYC Landmarks Preservation Commission

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Central IND Substation
Name of Property
New York County, NY
County and State

8. Narrative Statement of Significance

As part of the Multiple Property Submission of the Historic Resources of the New York City Subway System, the Central IND Substation is significant under Criterion A in the areas of transportation and community planning and development. The station also meets Criterion C in the areas of engineering and architectural design. The Central IND Substation was constructed in 1932 as the control center for the IND subway system. It retains a relatively high degree of integrity of location, design, setting, materials, workmanship, feeling and association; it is significant at the local level.

Substations play a vital role as part of the New York Subway system. A substation is an electrical plant built to convert high voltage alternating current (AC) to low voltage (about 600 volts) direct current (DC) used to provide traction power for the trains. The technology has changed over the years. Originally, large rotary converters were used and housed in the large (three- to four-story) buildings, as in the case of the original IRT and BMT substations. By the time the IND was built, mercury arc rectifiers (MRCs) became the state-of-the-art technology and most of the original IND substations are of this type. The building of the city-owned IND system brought significant changes in the supply technology. Instead of generating its own 11,000 volt 25 cycle AC, the city opted to purchase 13,200 volt 60 cycle AC from Con Edison (who coincidentally had purchased the original IRT powerhouse on West 59th Street in Manhattan).

The Central IND Substation is architecturally and historically significant in the areas of architecture and engineering. When it was built in 1932, at the beginning of the construction of the IND system (1932-1940), it was the largest substation in the system. Originally, it was the control center for the IND system, as well as the remote headquarters for power and signals. Operators used a semicircular supervisory board to monitor electrical demand and direct the automatic substations to respond accordingly.

The IND Substations are usually housed in masonry structures designed in a distinctly Art Deco tradition prevalent at the time, much like the telephone company buildings of the same era. Like other IND substations, this one is architecturally notable for its highly articulated Art Deco façade of brick and limestone. Art Deco motifs are found throughout the façade, including basketweave brick patterns, pressed geometric patterns on metal doors, and stylized lettering.

In 1993 the four original converters were removed. In 1994 Systems Operation moved to a new location and the original equipment was dispersed to a variety of places including

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Central IND Substation

Name of Property

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the Transit Museum. The substation was outfitted with new solid state rectifiers. The Track Structures office occupies the fourth floor. Although a piece of the limestone ornament has been removed and a square louver cut into the brick of the front facade, the original condition of the exterior is largely intact.

This block of West 53rd Street has loading docks, side/service entrances and parking garages high-rise luxury hotels and office towers that front Sixth and Seventh Avenues. The nature of this building's use and its brick face make it compatible with the other buildings on this street, though the original streetscape where this building fitted into a wall of similar scaled structures no longer exists.

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Section 9 Page 1

Central IND Substation
Name of Property
New York County, NY
County and State

9. Bibliography

Cudahy, Brian. *A Century of Subways: Celebrating 100 Years of the New York City's Underground Railways*. New York: Fordham University Press, 2003.

Hood, Clifton. *722 Miles: The Building of the Subways and How they Transformed New York*. Baltimore: Johns Hopkins University Press, 1993.

Interborough Rapid Transit Company. *The New York Subway: Its Construction and Equipment*. 1904. Reprinted on website managed by David Pirmann (2004). Retrieved 03/14/04 from source: <http://www.nycsubway.org/irt/irtbook/>.

National Park Service, Department of the Interior Historic American Engineering Record NY-122, "Interborough Rapid Transit Subway (Original Line): The NY Rapid Transit Decision of 1900: Economy, Society, Politics" prepared by Walter B. Katz, 1979.

New York City Landmarks Preservation Commission. *IRT Subway System Underground Interior Designation Report*. New York: NYC LPC, October, 1979.

Orlando, Barbara. "Recapturing the Past: Station Architecture," *At Your Service: MTA New York City Transit Employee Newsletter*, March, 2004.

Parsons, Brinckerhoff, Quade & Douglas, Inc., Historical Perspectives, Inc. and Robert E. Olmstead, P.E. "Phase I: Reconnaissance Level Historical Survey of Transit Authority Properties," June, 1991.

Payne, Christopher. *New York's Forgotten Substations: The Power Behind the Subway*. New York: Princeton Architectural Press, 2002.

Central IND Substation

New York County, New York

Name of Property

County and State

10. Geographical Data

Acreeage of Property Less than 1 acre

UTM References

(Place additional UTM references on a continuation sheet.)

1	1 8	5 8 5 9 9 0	4 5 1 2 6 5 0	3			
	Zone	Easting	Northing	Zone	Easting	Northing	
2				4			

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By (*See Continuation Sheet for authors*)

name/title Contact: Kathleen A. Howe, Historic Preservation Specialist

organization NYS Office of Parks, Recreation & Historic Preservation Date March 30, 2004

street & number Peebles Island, PO Box 189 Telephone 518-237-8643 ext. 3266

city or town Waterford state NY zip code 12188

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

- A **USGS map** (7.5 or 15 minute series) indicating the property's location.
- A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

Additional Items

(Check with SHPO or FPO for any additional items)

Property Owner (Complete this item at the request of the SHPO or FPO)

name MTA New York City Transit Contact: Hollie Wells, Project Administrator

street & number 2 Broadway, 6th Floor, D6.125 telephone 646-252-4268

city or town New York state NY zip code 10004

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act. As amended (16 U.S.C. 470 *et seq.*)

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, D.C. 20503.

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Central IND Substation

Name of Property

New York County, NY

County and State

10. Geographical Data

Verbal Boundary Description

The boundary of the Central IND Substation is shown as the bold line on the accompanying site plan entitled, "CITI Map - central IND Substation - 126 West 53rd Street." The designation for the Central IND Substation includes all portions of the station structure and the property included within the boundaries of the NYCTA right-of way.

Boundary Description

The boundary for the Central IND Substation encompasses the entire station building and the NYCTA right-of way associated with the structure.

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Central IND Substation
Name of Property
New York County, NY
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11. Form Prepared By:

Steven Bedford, Principal Architectural Historian
Stacey Vairo, Architectural Historian
Fitzgerald & Halliday, Inc.
72 Cedar Street
Hartford, CT 06106
860-247-7200

United States Department of the Interior
National Park Service

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Section 11 Page 2

Central IND Substation
Name of Property
New York County, NY
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Additional Documentation

List of Black and White Photos

Central IND Substation

New York County, NY

Photographer: Stacey Vairo

Date: November 2004

Negatives on file: Fitzgerald & Halliday, Inc.
72 Cedar Street
Hartford, CT 06106

1. Exterior of Central IND Substation. View south.
2. Limestone detail on northern façade. View south.
3. Limestone frame above central portal. View south.
4. Limestone surround of western portal. View south.
5. Railing around former subway entrance. View southeast.
6. Interior. View south.
7. Spiral staircase leading to basement. View northeast.
8. Feeder breaker panels in basement. View south.
9. Detail of feeder breaker panels. View southeast.

Central IND
Substation
126 West 53rd St
New York County,
NY

200 000 FEET
(NY LONG ISLAND)

Zone 18
Easting: 585990
Northing: 4512650

USGS
Central Park Quad
1:24,000

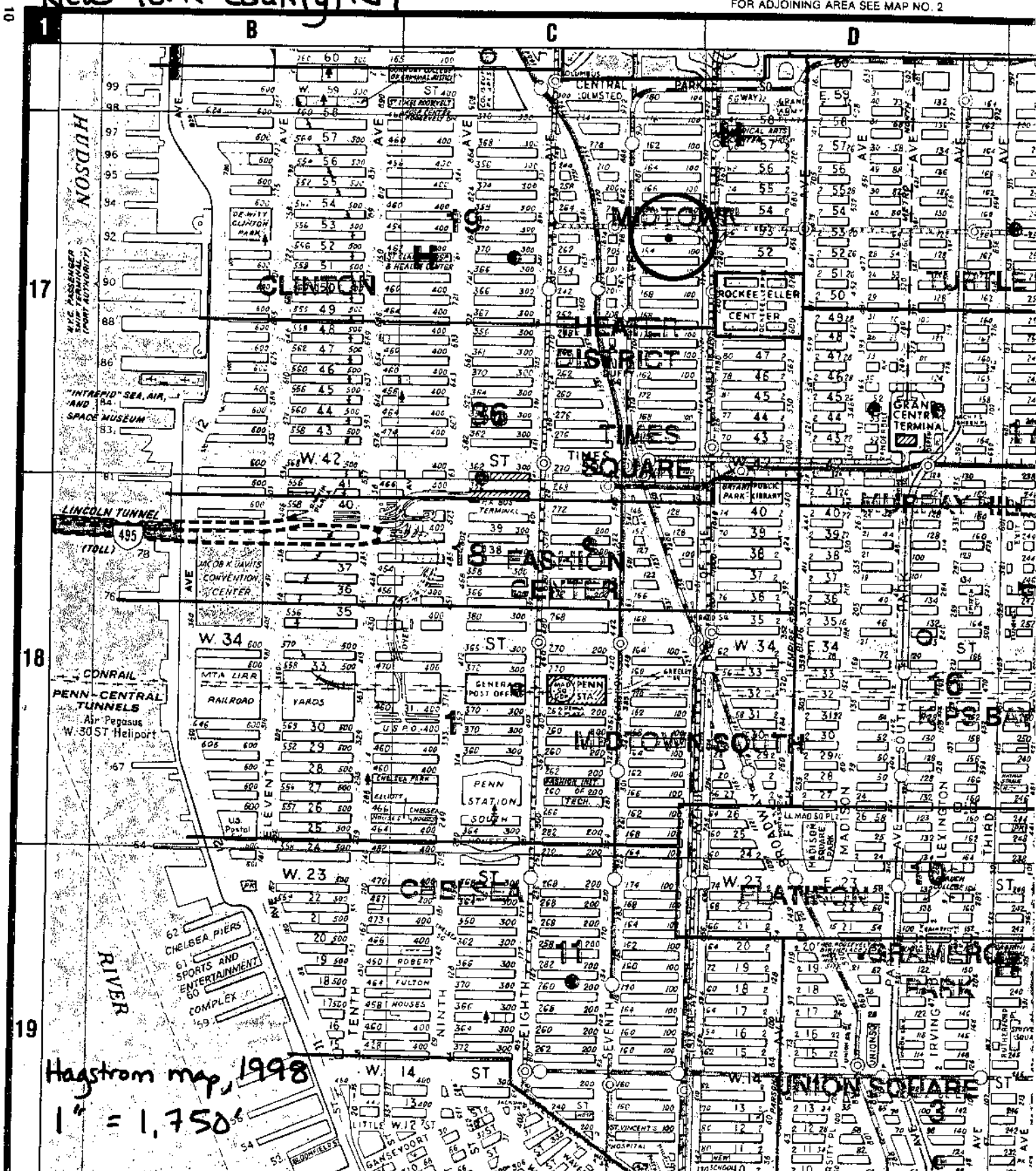


Produced by the United States Geological Survey
Topography compiled 1966. Planimetry derived from imagery taken
1977 and other sources. Photoinspected using imagery dated 1995;
no major culture or drainage changes observed. Survey control



Central IND Substation
 126 West 53rd Street
 New York County, NY

FOR ADJOINING AREA SEE MAP NO. 2



17

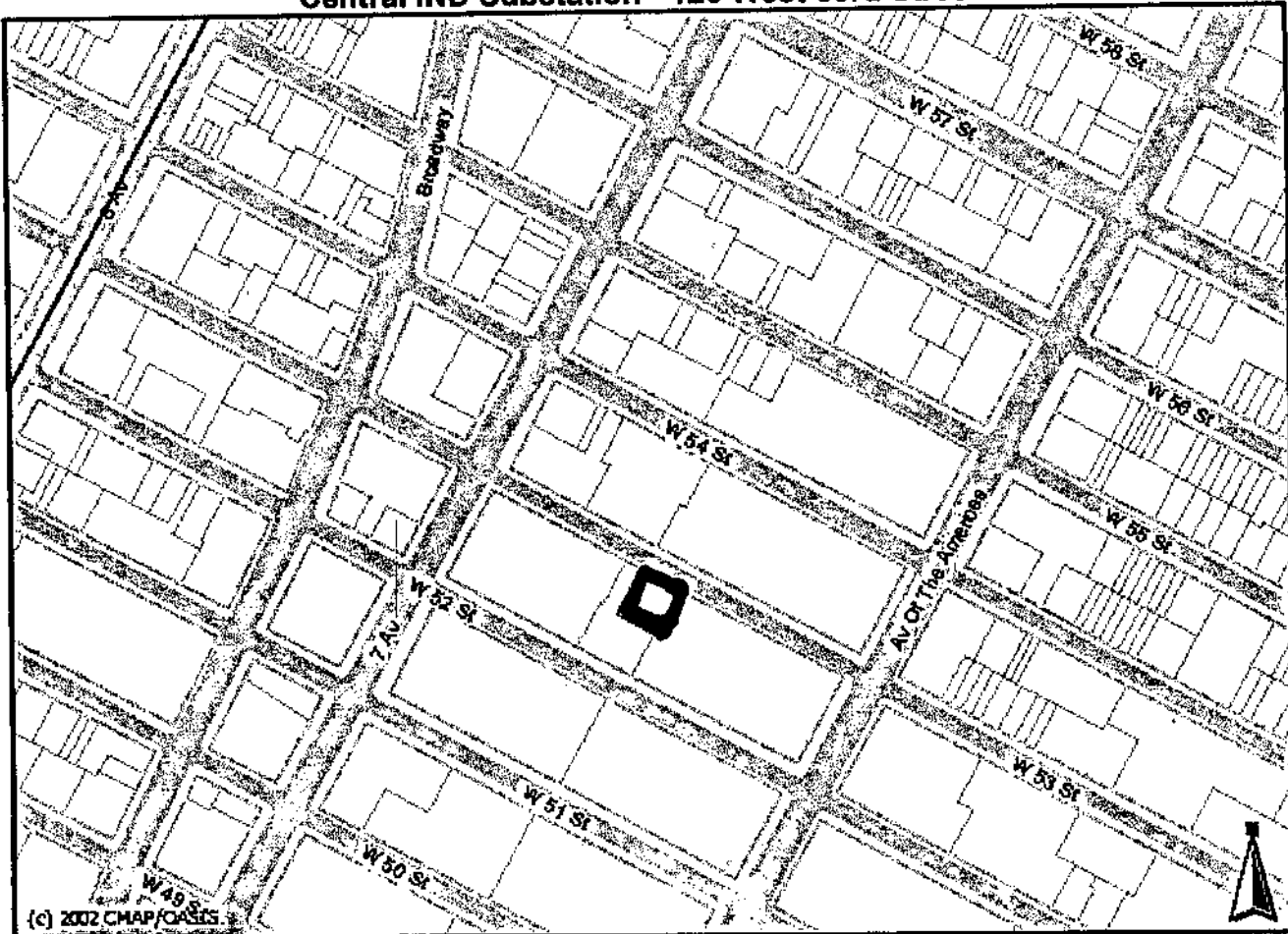
18

19

Hagstrom map, 1998
 1" = 1,750'










CITI Map

Central IND Substation - 126 West 53rd Street






width of map is 0.48 miles.

Property Land Use

-  Block/Lot Boundaries
-  1 & 2 Family Residential
-  Multi-Family Residential
-  Mixed Residential/Commercial
-  Commercial
-  Institutions
-  Parking & Transportation
-  Industrial
-  Vacant

Transportation

-  Streets/Bridges
-  Subway Stations
-  Subway Routes

General Land Use

-  Community Gardens
-  Parks
-  Playgrounds
-  Open Spaces along Streets
-  Cemeteries

Community Facilities

-  Schools
- ### Planning Proposals
-  Open Space Proposals
 -  Rezoning Areas
 -  Olympic Transportation Hubs
 -  Olympic Transportation Rtes
 -  Olympic Trails
 -  Olympic Venues

Political Districts

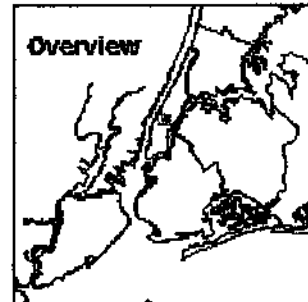
-  Community Districts
-  City Council Districts



NYC Basemap copyrighted by the New York City Department of Environmental Protection, 2000.

The Bytes of the Big Apple (TM) PLUTO (TM) and Tax Block & Tax Lot files are copyrighted by the New York City Department of City Planning.

Map provided by the Open Accessible Space Information System (OASIS) of New York City





The New York City Landmarks Preservation Commission

1 Centre Street, 9th Floor North, New York NY 10007 TEL: 212-669-7922 FAX: 212-669-7797
<http://nyc.gov/landmarks/>



RONDA WIST
EXECUTIVE DIRECTOR
rwist@lpc.nyc.gov

February 3, 2005

Ms. Ruth Pierpont, Director
New York State Office of Parks Recreation
and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island
P.O. Box 189
Waterford, New York 12188-0189

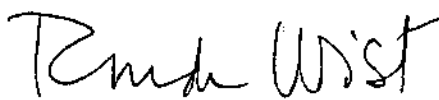
Re: The Historic Resources of the New York City Subway
System, various counties, New York

Dear Ms. Pierpont:

I write on behalf of Chair Robert B. Tierney in response to your request for comment on the eligibility of The Historic Resources of the New York City Subway System (Bronx, Kings and New York Counties) and the individual substations and related buildings nominated for the State and National Registers of Historic Places.

The Commission has reviewed the materials submitted by the Historic Preservation Field Services Bureau and believes that the Joralemon Street Tunnel, Subway Substation 7, Substation 13, Substation 17, Substation 42, Substation 409, Substation 235, Central IND Substation, Substation 219, the 207th Street Yard—Signal Service Building and Tower B, the Coney Island Yard Gatehouse, the Coney Island Electric Motor Repair Shop, the Concourse Yard Entry Buildings, and the Concourse Yard Substation appear to meet the criteria for inclusion on the State and National Registers of Historic Places.

Sincerely yours,


Ronda Wist

cc: Robert B. Tierney, Chair
Mary Beth Betts

