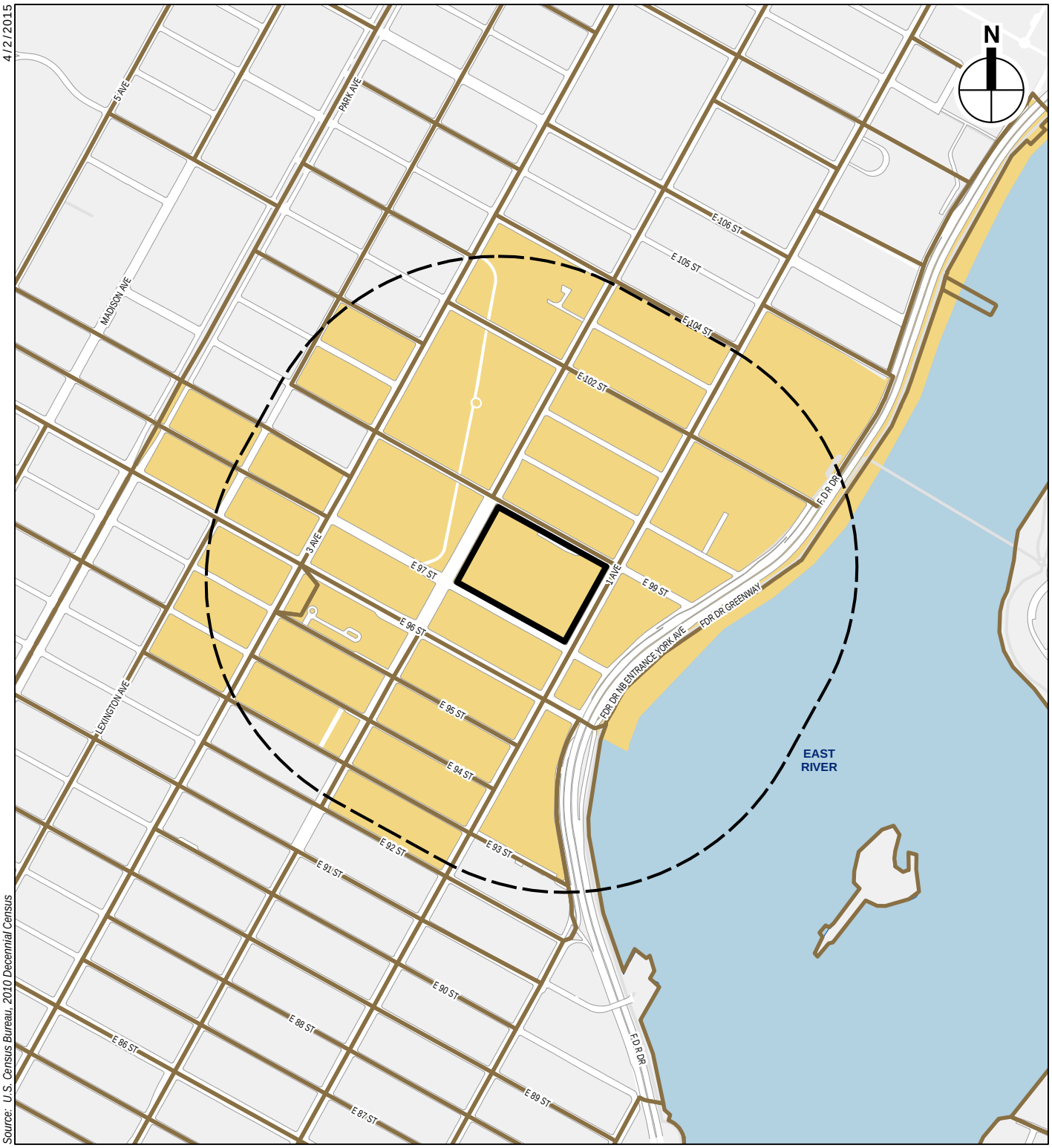


Project Site

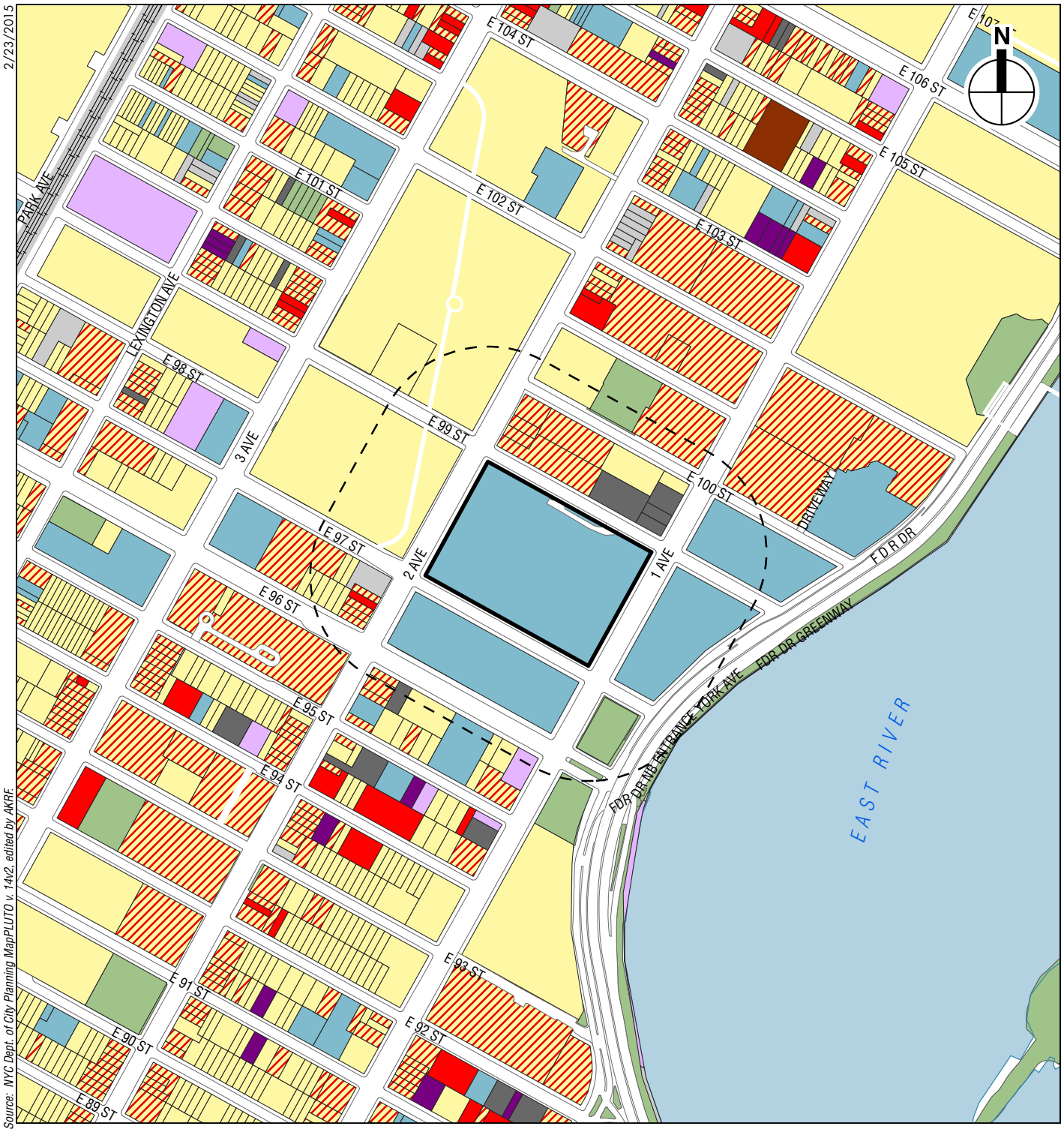
Quarter-Mile Buffer

2010 Census Block Group Bounday

Community of Concern Study Area

0 1,000 FEET

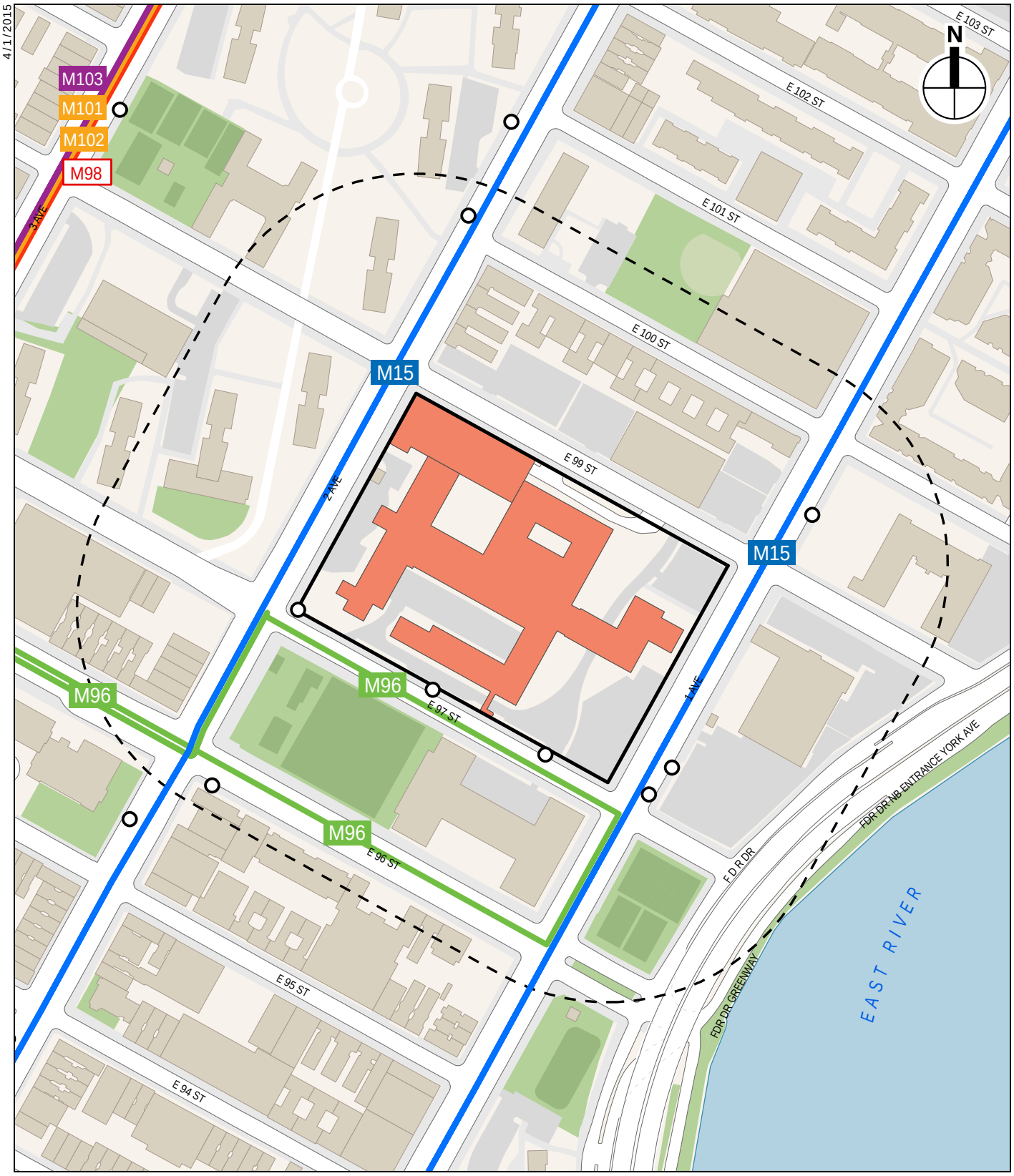
Community of Concern
Environmental Justice Study Area
Figure 5.10-1



Project Site
Study Area (400-foot boundary)
Commercial and Office Buildings
Hotels
Industrial and Manufacturing
Open Space and Outdoor Recreation
Parking Facilities
Public Facilities and Institutions
Residential
Residential with Commercial Below
Transportation and Utility
Vacant Land

0 200 FEET

Existing Land Use
Figure 5.11-1



Project Site
Study Area (400-foot boundary)
Bus Stops
M103 Bus Route
M101, M102 Bus Routes
M15 Bus Route
M96 Bus Route
M98 Bus Route
0 200 FEET

Transportation
Figure 5.13-1

Appendix C
Tables

Table 5.2-1
National Ambient Air Quality Standards (NAAQS)

Pollutant	Primary		Secondary	
	ppm	µg/m^3	ppm	µg/m^3
Carbon Monoxide (CO)				
8-Hour Average [1]	9	10,000	None	
1-Hour Average [1]	35	40,000		
Lead				
Rolling 3-Month Average [2]	NA	0.15	NA	0.15
Nitrogen Dioxide (NO_2)				
1-Hour Average [3]	0.100	189	None	
Annual Average	0.053	100	0.053	100
Ozone (O_3)				
8-Hour Average [4,5]	0.075	150	0.075	150
Respirable Particulate Matter (PM_{10})				
24-Hour Average [1]	NA	150	NA	150
Fine Respirable Particulate Matter ($PM_{2.5}$)				
Annual Mean [6]	NA	12	NA	15
24-Hour Average [7]	NA	35	NA	35
Sulfur Dioxide (SO_2) [8]				
1-Hour Average[9]	0.075	196	NA	NA
Maximum 3-Hour Average [1]	NA	NA	0.50	1,300

Notes:

ppm – parts per million (unit of measure for gases only)
µg/m^3 – micrograms per cubic meter (unit of measure for gases and particles, including lead)
NA – not applicable

All annual periods refer to calendar year.
Standards are defined in ppm. Approximately equivalent concentrations in µg/m^3 are presented.

(1) Not to be exceeded more than once a year.
(2) EPA has lowered the NAAQS down from 1.5 µg/m^3, effective January 12, 2009.
(3) 3-year average of the annual 98th percentile daily maximum 1-hr average concentration. Effective April 12, 2010.
(4) 3-year average of the annual fourth highest daily maximum 8-hr average concentration.
(5) EPA has proposed lowering the primary standard further to within the range 0.060-0.070 ppm, and adding a secondary standard measured as a cumulative concentration within the range of 7 to 15 ppm-hours aimed mainly at protecting sensitive vegetation. A final decision on these standards has been postponed and is currently in review.
(6) 3-year average of annual mean. EPA has lowered the primary standard from 15 µg/m^3, effective March 2013.
(7) Not to be exceeded by the annual 98th percentile when averaged over 3 years.
(8) EPA revoked the 24-hour and annual primary standards, replacing them with a 1-hour average standard. Effective August 23, 2010.
(9) 3-year average of the annual 99th percentile daily maximum 1-hr average concentration.

Source: 40 CFR Part 50: National Primary and Secondary Ambient Air Quality Standards.

Table 5.2-2
Representative Monitored Ambient Air Quality Data

Pollutant	Location	Units	Averaging Period	Concentration	NAAQS
CO	CCNY, Manhattan	ppm	8-hour	1.2	9
	CCNY, Manhattan		1-hour	1.8	35
SO_2	Botanical Garden, Bronx	µg/m^3	3-hour	67.3	1,300
			1-hour	81.0	196
PM_{10}	P.S. 19, Manhattan	µg/m^3	24-hour	40	150
$PM_{2.5}$	JHS 45, Manhattan	µg/m^3	Annual	9.5	12
			24-hour	22.2	35
NO_2	IS 52, Bronx	µg/m^3	Annual	39	100
	Botanical Garden, Bronx		1-hour	112	189
Lead	IS 52, Bronx	µg/m^3	3-month	0.005	0.15
Ozone	CCNY, Manhattan	ppm	8-hour	0.072	0.075

Notes:

-Based on the NAAQS definitions, the CO and 3-hour SO2 concentrations for short-term averages are the second-highest from the year; the 3-hour SO2 concentration is based on 2012 data, which is the most recent available data from DEC.

-SO2 1-hour and NO2 1-hour concentrations are the average of the 99th percentile and 98th percentile, respectively, of the highest daily 1-hour maximum from 2011 to 2013.

-PM2.5 annual concentrations are the average of 2011–2013, and the 24-hour concentration is the average of the annual 98th percentiles in 2011- 2013.

-8-Hour average ozone concentrations are the average of the 4th highest-daily values from 2011 to 2013.

Source: DEC, New York State Ambient Air Quality Data.

Table 5.6-1
Vegetation Identified within the Project Site

Common Name	Scientific Name	Stratum
Tree of heaven	*Ailanthus altissima*	Tree
Ironwood	*Carpinus caroliniana*	Tree
Winged euonymus	*Euonymus alatus*	Shrub
Forscythia	*Forscythia suspensa*	Shrub
Ginko	*Ginko biloba*	Tree
Honey locust	*Gledistia triacanthos*	Tree
White mulberry	*Morus alba*	Tree
London plane tree	*Platanus acerfolia*	Tree
Cherry	*Prunus* sp	Tree
Yew	*Taxus* sp	Shrub

Sources: Reconnaissance investigation on February 24, 2015

Table 5.7-1 New York State Breeding Bird Atlas (2000-2005) Results for Block 5851A	
Common Name	**Scientific Name**
Mallard	*Anas platyrhynchos*
Gadwall	*Anas strepera*
Tufted Titmouse	*Baeolophus bicolor*
Cedar Waxwing	*Bombycilla cedrorum*
Red-tailed Hawk	*Buteo jamaicensis*
Northern Cardinal	*Cardinalis cardinalis*
House Finch	*Carpodacus mexicanus*
Northern Flicker	*Colaptes auratus*
Rock Pigeon	*Columba livia*
American Crow	*Corvus brachyrhynchos*
Blue Jay	*Cyanocitta cristata*
Gray Catbird	*Dumetella carolinensis*
Peregrine Falcon	*Falco peregrinus*
American Kestrel	*Falco sparverius*
Barn Swallow	*Hirundo rustica*
Wood Thrush	*Hylocichla mustelina*
Baltimore Oriole	*Icterus galbula*
Eastern Screech-Owl	*Megascops asio*
Red-bellied Woodpecker	*Melanerpes carolinus*
Song Sparrow	*Melospiza melodia*
Northern Mockingbird	*Mimus polyglottos*
Great Crested Flycatcher	*Myiarchus crinitus*
House Sparrow	*Passer domesticus*
Downy Woodpecker	*Picoides pubescens*
Hairy Woodpecker	*Picoides villosus*
Eastern Towhee	*Pipilo erythrophthalmus*
Common Grackle	*Quiscalus quiscula*
European Starling	*Sturnus vulgaris*
Carolina Wren	*Thryothorus ludovicianus*
House Wren	*Troglodytes aedon*
American Robin	*Turdus migratorius*
Eastern Kingbird	*Tyrannus tyrannus*
Mourning Dove	*Zenaida macroura*
Sources: NYS Breeding Bird Atlas (2000-2005) Block 5851A	

Appendix D
Correspondences

Appendix D
Correspondence 5.5-1
Coastal Zone Management Act Consultation

U.S. Department of Homeland Security
FEMA-4085-DR-NY
Sandy Recovery Field Office, Forest Hills Tower
118-35 Queens Blvd., 6th Floor
Forest Hills, NY 11375

April 16, 2015

Mr. Jeffrey Zappieri
Consistency Review, New York Coastal Management Program
New York Department of State
One Commerce Place
99 Washington Avenue, Suite 1010
Albany, New York 12231-0001

Re: State's Coastal Management Program Consistency Review of FEMA-4085-DR-NY Hurricane Sandy: New York City Health and Hospitals Corporation - Metropolitan Hospital Center

Dear Mr. Zappieri:

The Federal Emergency Management Agency (FEMA) is proposing to provide federal funding from its Public Assistance (PA) Program to assist New York City Health and Hospitals Corporation (HHC) with a comprehensive flood mitigation project for Metropolitan Hospital Center (MHC) (40.785038, -73.944985). A perimeter flood protection system will surround the MHC campus. This system will be designed to the 0.2 percent annual probability ("500-year") flood elevation of +13 feet North American Vertical Datum of 1988 (NAVD88) plus three feet of freeboard for sea level rise and will include floodwalls along the open portions of the campus' perimeter.

Additionally there will be strengthening of the basement walls of the Mental Health Building (MHB) at the northwest corner of the campus, and flood proof doors installed at several locations along the first floor. Vehicular and pedestrian floodgates will be provided to maintain access to the hospital. The tunnel between the MHB and the Main Building along East 99th Street (which carries high pressure steam piping, chilled water piping, and electrical conduits), will be rebuilt to support the floodwall's weight, and a floodgate will be added to the MHB tunnel access door.

New York State Coastal Policies 1 through 44 have been reviewed with their respect to the proposed project to be performed per FEMA's disaster recovery operations. Based on this review, FEMA has determined that the above referenced proposed activities are consistent with the policies of the New York State Coastal Management Program (CMP) and will not hinder the achievement of those policies. A summary of the proposed project's consistency with the State Coastal Policies is included as an attachment.

FEMA is seeking the New York Department of State's (NYDOS) concurrence with FEMA's Coastal Zone Consistency Determination, in accordance with the requirement of the Coastal Zone Management Act of 1972 (15 CFR Part 930), prior to the release of federal funding to the grant recipient.

FEMA Environment Historic Preservation (EHP) looks forward to your office's feedback within 60 days of receipt of this letter. If you have any questions, please contact me at 718.575.7289 or 202.286.1627or at john.dawson@fema.dhs.gov.

Sincerely,

HOLLY B WINTON

Digitally signed by HOLLY B WINTON
DN: c=US, o=U.S. Government, ou=Department of Homeland Security, ou=FEMA, ou=People, cn=HOLLY B WINTON, 0.9.2342.19200300.100.1.1=0232053497.FEMA
Date: 2015.04.16 13:28:04 -04'00'

For

John Dawson
EHP, Branch Director
New York Sandy Recovery Field Office/4085-DR-NY
Desk (no voice mail): 718.575.7289
Cell: 202.286.1627

JD/bw

Encl: Google Earth image
Site Plans
Photos
Consistencies with Coastal Policies of New York Worksheet

ATTACHMENTS

Figure 1. NYC HHC Metropolitan Hospital Center

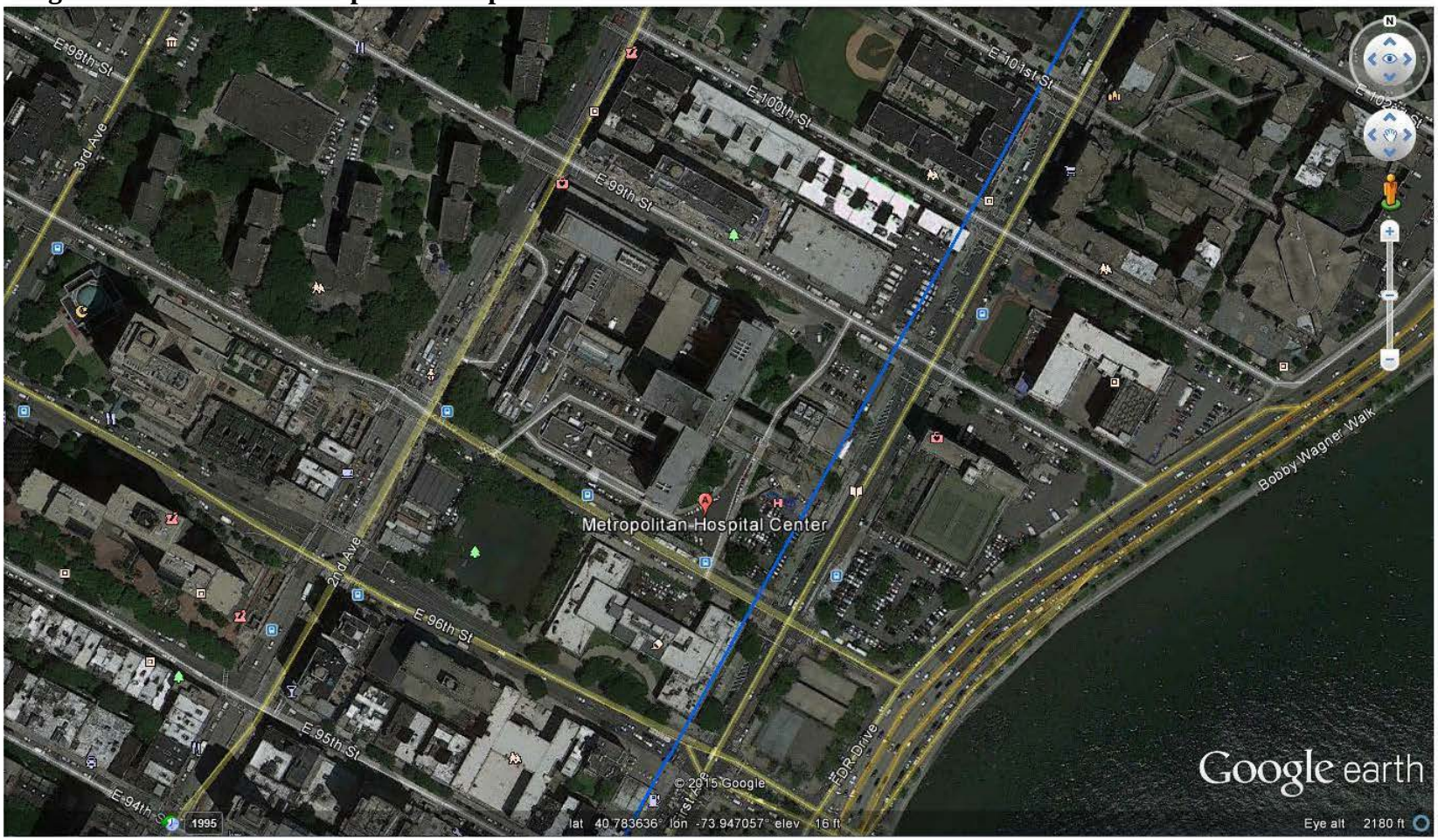


Figure 2: NYC HHC Bellevue Hospital Drawings/Plans

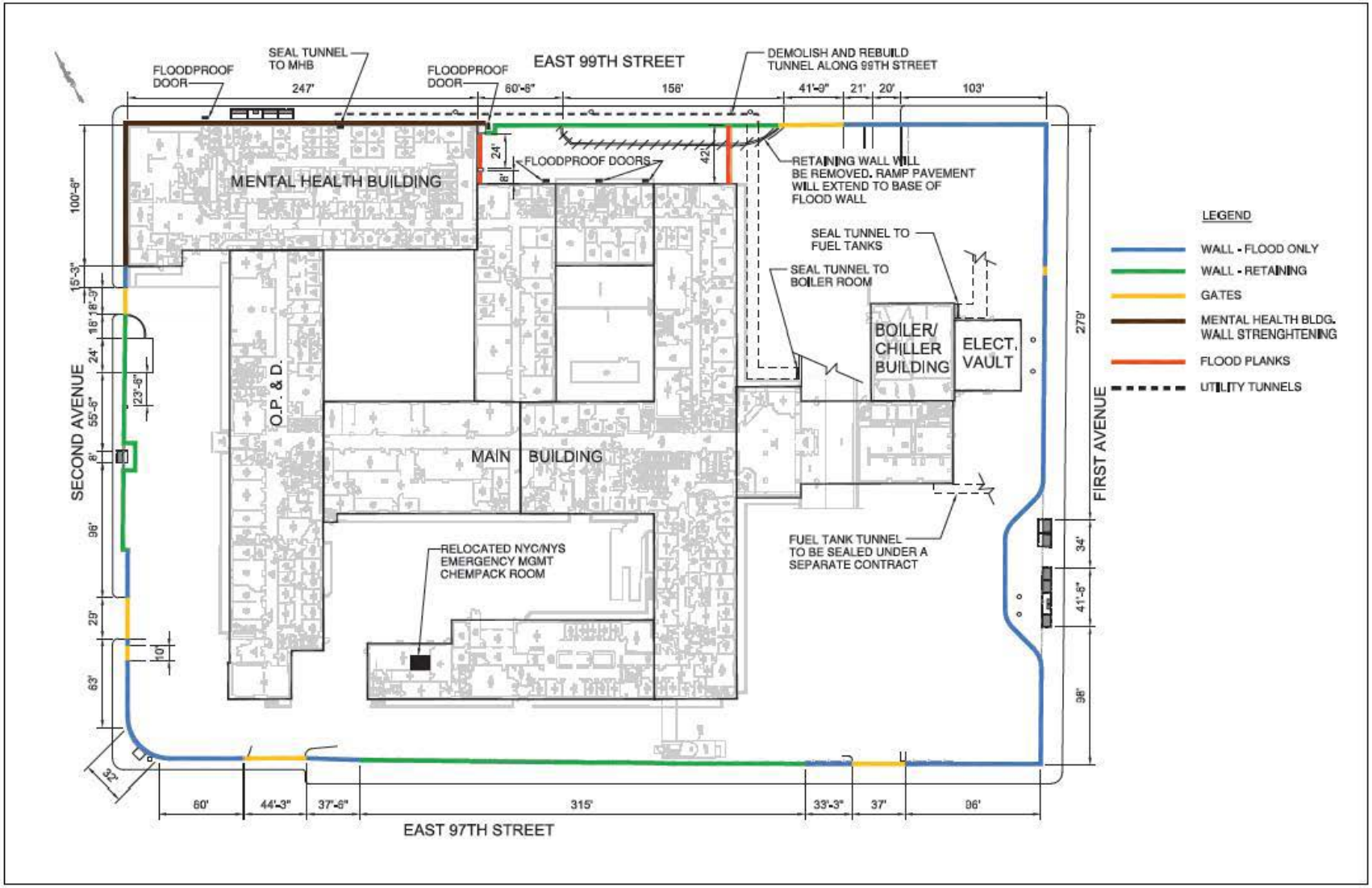


Figure 3: Photos of MHC Campus

View of mowed lawn with trees community, facing east 1

View of parking lot and hospital building, facing south 2

View of hospital building and trees, facing east 3

View of parking lot and trees, facing south 4

Summary Table for Project's Consistency with Coastal Policies of New York State

Policy 1

Restore, revitalize, and redevelop deteriorated and underutilized waterfront areas for commercial, industrial, cultural, recreational, and other compatible uses.

N/A: This policy is not applicable to the Proposed Project. The Project Site is an active hospital and is not deteriorated or underutilized. The need for the Proposed Project is to repair, rehabilitate, and increase the resiliency of the hospital, which was severely damaged during Hurricane Sandy. In addition, the Project Site is not located directly adjacent to the waterfront and is separated from the waterfront, by First Avenue, a major highway (Franklin Delano Roosevelt [FDR] Drive), and other, actively used waterfront sites..

Policy 2

Facilitate the siting of water-dependent uses and facilities on or adjacent to coastal waters.

N/A: This policy is not applicable to the Proposed Project. The Project Site is not located directly adjacent to the waterfront and is separated from the waterfront by First Avenue, a major highway (FDR Drive), and other, actively used waterfront sites. No new uses are proposed as part of the Proposed Project.

Policy 3

Further develop the state's major ports of Albany, Buffalo, New York, Ogdensburg, and Oswego as centers of commerce and industry, and encourage the siting, in these port areas, including those under the jurisdiction of state public authorities, of land use and development which is essential to, or in support of, the waterborne transportation of cargo and people.

N/A: This policy is not applicable to the Proposed Project. The Project Site is not adjacent to, or substantially close to, active Port operations for the City of New York.

Policy 4

Strengthen the economic base of smaller harbor areas by encouraging the development and enhancement of those traditional uses and activities which have provided such areas with their unique maritime identity.

N/A: This policy is not applicable to the Proposed Project as the Project Site is not located in or near a small harbor area.

Policy 5

Encourage the location of development in areas where public services and facilities essential to such development are adequate.

Consistent: The Proposed Project will repair, rehabilitate, and increase the resiliency of the existing MHC. The Project Site is currently served by adequate public services and facilities and is within a densely populated and well-served area of the City of New York.

Policy 6

Expedite permit procedures in order to facilitate the siting of development activities at suitable locations.

FEMA will provide a 60-day consistency determination review period to the NYSDOS Coastal Management Program before processing the federal disaster relief grant specifically for declaration of NY-4085.

Policy 7

Significant coastal fish and wildlife habitats will be protected, preserved, and where practical, restored so as to maintain their viability as habitats.

N/A: This policy is not applicable to the Proposed Project. There are no areas within the Project Site or surrounding area that have been designated by the New York State Department of State (NYSDOS) as Significant Coastal Fish and Wildlife Habitat (SCFWH).

Policy 8

Protect fish and wildlife resources in the coastal area from the introduction of hazardous wastes and other pollutants which bio-accumulate in the food chain or which cause significant sub lethal or lethal effect on those resources.

Consistent: The Proposed Project is not expected to introduce new hazardous waste or pollutants to the environment. The increased flood protection afforded to the Project Site, which does generate and store hazardous wastes, from the Proposed Project will decrease the potential for flood waters to cause the accidental release of those hazardous materials, thereby increasing the protection afforded to the environment.

Policy 9

Expand recreational use of fish and wildlife resources in coastal areas by increasing access to existing resources, supplementing existing stocks, and developing new resources.

N/A: This policy is not applicable to the Proposed Project (an existing hospital) or the Project Site, which is not located directly adjacent to the waterfront and is separated from the waterfront by First Avenue, a major highway (FDR Drive), and other, actively used waterfront sites.

Policy 10

Further develop commercial finfish, shellfish, and crustacean resources in the coastal area by encouraging the construction of new, or improvement of existing on-shore commercial fishing facilities, increasing marketing of the state's seafood, maintaining adequate stocks, and expanding aquaculture facilities.

N/A: This policy is not applicable to the Proposed Project (an existing hospital) or the Project Site, which is not located directly adjacent to the waterfront and is separated from the waterfront by First Avenue, a major highway (FDR Drive), and other, actively used waterfront sites.

Policy 11

Buildings and other structures will be sited in the coastal area so as to minimize damage to property and the endangering of human lives caused by flooding and erosion.

Consistent: The Project Site is located in a densely populated and built area and is currently used as a hospital. The purpose of the Proposed Project is to repair, rehabilitate, and increase the resiliency of the hospital so that damage to the hospital is minimized during future flood events. Increasing the resiliency of the hospital will, in turn, reduce the danger to human lives caused by future flood events, by allowing the hospital to continue providing its essential core services.

Policy 12

Activities or development in the coastal area will be undertaken so as to minimize damage to natural resources and property from flooding and erosion by protecting natural protective features including beaches, dunes, barrier islands and bluffs.

N/A: This policy is not applicable to the Project Site, which is not adjacent to natural protective features or areas on which such features could be built. The Proposed Project would minimize damage to the Project Site from flooding.

Policy 13

The construction or reconstruction of erosion protection structures shall be undertaken only if they have a reasonable probability of controlling erosion for at least thirty years as demonstrated in design and construction standards and/or assured maintenance or replacement programs.

N/A: This policy is not applicable to the Proposed Project, which does not include the construction or reconstruction of erosion protection structures.

Policy 14

Activities and development, including the construction or reconstruction of erosion protection structures, shall be undertaken so that there will be no measurable increase in erosion or flooding at the site of such activities or development, or at other locations.

Consistent: The purpose of the Proposed Project is to repair, rehabilitate, and increase the resiliency of the existing hospital. A primary component of the Proposed Project is the construction of perimeter flood protection system around the hospital campus. A Hydrology and Hydraulics study was conducted to model the effects of the Proposed Project on flooding conditions at other locations. This study found that there would be no significant increase in flooding at other properties as a result of the Proposed Project.

Policy 15

Mining, excavation or dredging in coastal waters shall not significantly interfere with the natural coastal processes which supply beach materials to land adjacent to such waters and shall be undertaken in a manner which will not cause an increase in erosion of such land.

N/A: This policy is not applicable to the Proposed Project, which does not propose any dredging of coastal waters.

Policy 16

Public funds shall only be used for erosion protective structures where necessary to protect human life, and new development which requires a location within or adjacent to an erosion hazard area to be able to function, or existing development; and only where the public benefits outweigh the long term monetary and other costs including the potential for increasing erosion and adverse effects on natural protective features.

N/A: This policy is not applicable to the Proposed Project, which does not include the construction or reconstruction of erosion protection structures..

Policy 17

Non-structural measures to minimize damage to natural resources and property from flooding and erosion shall be used whenever possible.

Consistent: The Proposed Project includes structural and non-structural measures to minimize property damage from flooding. However, in order to provide the level of protection that is necessary to this critical public service facility, structural flood protection measures, in particular the construction of a perimeter flood protection system, are required.

Policy 18

To safeguard the vital economic, social and environmental interests of the state and of its citizens, proposed major actions in the coastal area must give full consideration to those interests, and to the safeguards which the state has established to protect valuable coastal resource areas.

Consistent: The Proposed Project is the subject of an Environmental Assessment (EA) by FEMA, pursuant to the National Environmental Policy Act (NEPA). The EA will evaluate the social and environmental impacts of the Proposed Project. While the economic impacts of the Proposed Project will not be directly analyzed in the EA, protecting this critical facility from recurring damage and increasing the hospital's ability to continue operating during future disasters will provide economic benefits to the City and State. In addition, the Proposed Project will comply with all permits and regulations necessary for the construction and operation of the Proposed Project, which will help safeguard the State's critical interests.

Policy 19

Protect, maintain, and increase the level and types of access to public water-related recreation resources and facilities.

N/A: This policy is not applicable to the Proposed Project, which is a currently operating hospital. In addition, the Project Site is not located directly adjacent to the waterfront and is separated from the waterfront by First Avenue, a major highway (FDR Drive), and other, actively used waterfront sites.

Policy 20

Access to the publicly-owned foreshore and to lands immediately adjacent to the foreshore or the water's edge that are publicly-owned shall be provided and it shall be provided in a manner compatible with adjoining uses.

N/A: This policy is not applicable to the Proposed Project (an existing hospital) or the Project Site, which is not located directly adjacent to the waterfront and is separated from the waterfront by First Avenue, a major highway (FDR Drive), and other, actively used waterfront sites.

Policy 21

Water-dependent and water-enhanced recreation will be encouraged and facilitated, and will be given priority over non-water-related used along the coast.

N/A: The Project Site is actively used as a hospital. No change of use is proposed as part of the Proposed Project. In addition, the Project Site is not located directly adjacent to the waterfront and is separated from the waterfront by First Avenue, a major highway (FDR Drive), and other, actively used waterfront sites.

Policy 22

Development, when located adjacent to the shore, will provide for water-related recreation, whenever such use is compatible with reasonably anticipated demand for such activities, and is compatible with the primary purpose of the development.

N/A: This policy is not applicable to the Proposed Project. The Project Site is not located directly adjacent to the waterfront and is separated from the waterfront by First Avenue, a major highway (FDR Drive), and other, actively used waterfront sites.

Policy 23

Protect, enhance and restore structures, districts, areas or sites that are of significance in the history, architecture, archaeology or culture of the state, its communities, or the nation.

Consistent: FEMA will be consulting with the State Historic Preservation Office and Participating Tribes per Section 106 of the National Historic Preservation Act, to address any proposed ground disturbing activities as identified in submitted project plans. Any identified adverse effect(s) for standing structures will be mitigated through the Abbreviated Consultation process outlined in the New York Programmatic Agreement. .

Policy 24

Prevent impairment of scenic resources of statewide significance.

N/A: The Project Site is not located in a scenic area of statewide significance, nor will it have an effect on any such area.

Policy 25

Protect, restore or enhance natural and man-made resources which are not identified as being of statewide significance, but which contribute to the overall scenic quality of the coastal area.

N/A: The Project Site is currently occupied by an existing hospital and is located in a densely populated and developed area within the City of New York. In addition, the Project Site is not located directly adjacent to the waterfront and is separated from the waterfront by First Avenue, a major highway (FDR Drive), and other, actively used waterfront sites.

Policy 26

Conserve and protect agricultural lands in the state's coastal area.

N/A: This policy is not applicable to the Proposed Project as there are no agricultural lands on or adjacent to the Project Site.

Policy 27

Decisions on the siting and construction of major energy facilities in the coastal area will be based on public energy needs, compatibility of such facilities with the environment, and the facility's need for a shorefront location.

N/A: This policy is not applicable to the Proposed Project, which does not include the siting or construction of a major energy facility.

Policy 28

Ice management practices shall not interfere with the production of hydroelectric power, damage significant fish and wildlife and their habitats, or increase shoreline erosion or flooding.

N/A: This policy is not applicable to the Proposed Project, which will not have any impact on ice management practices.

Policy 29

Encourage the development of energy resources on the outer continental shelf, in Lake Erie and in other water bodies, and ensure the environmental safety of such activities.

N/A: This policy is not applicable to the Proposed Project or Project Site.

Policy 30

Municipal, industrial, and commercial discharge of pollutants, including but not limited to, toxic and hazardous substances, into coastal waters will conform to state and national water quality standards.

N/A: The Proposed Project does not include any changes to the nature, amount, or location of the discharge of stormwater from the Project Site. The Project Site will continue to conform to all appropriate state and federal permit conditions. As a result of the Proposed Project, the potential for the accidental release of toxic or hazardous substances from the Project Site as a result of flooding will be decreased.

Policy 31

State coastal area policies and management objectives of approved local waterfront revitalization programs will be considered while reviewing coastal water classifications and while modifying water quality standards; however, those waters already overburdened with contaminants will be recognized as being a development constraint.

N/A: This policy is not applicable to the Proposed Project, which does not propose changes to water quality standards or coastal management policies and objectives.

Policy 32

Encourage the use of alternative or innovative sanitary waste systems in small communities where the costs of conventional facilities are unreasonably high, given the size of the existing tax base of these communities.

N/A: This policy is not applicable to the Proposed Project, which is currently served by an existing public sewer system.

Policy 33

Best management practices will be used to ensure the control of storm water runoff and combined sewer overflows draining into coastal waters.

Consistent: The Proposed Project does not include any changes to the nature, amount, or location of the discharge of stormwater from the Project Site. As such, no impacts to stormwater runoff systems are expected as a result of the Proposed Project. Best management practices, including the preparation and execution of a sediment and erosion control plan, will be utilized during construction of the Proposed Project to reduce the potential discharge of soils into coastal waters.

Policy 34

Discharge of waste materials into coastal waters from vessels subject to state jurisdiction will be limited so as to protect significant fish and wildlife habitats, recreational areas and water supply areas.

N/A: This policy is not applicable to the Proposed Project, which will have no impact on vessel discharges.

Policy 35

Dredging and filling in coastal waters and disposal of dredged material will be undertaken in a manner that meets existing State permit requirements, and protects significant fish and wildlife habitats, scenic resources, natural protective features, important agricultural lands, and wetlands.

N/A: This policy is not applicable to the Proposed Project, which does not propose and dredging or filling of coastal waters.

Policy 36

Activities related to the shipment and storage of petroleum and other hazardous materials will be conducted in a manner that will prevent or at least minimize spills into coastal waters; all practicable efforts will be undertaken to expedite the cleanup of such discharges; and restitution for damages will be required when these spills occur.

Consistent: The Proposed Project is not anticipated to have any adverse impact on the shipment or storage of petroleum or other hazardous materials. All material storage (permanent or temporary) and delivery, including during and following construction, will continue to meet or exceed all local, state, and federal requirements. Finally, the Proposed Project will decrease the potential for petroleum and other hazardous materials to be accidentally released during flood events by increasing the ability of the Project Site to withstand future flood events.

Policy 37

Best management practices will be utilized to minimize the non-point discharge of excess nutrients, organics and eroded soils into coastal waters.

Consistent: Best management practices, including the preparation and execution of a sediment and erosion control plan, will be utilized during construction of the Proposed Project to reduce the potential discharge of soils into coastal waters. When the Proposed Project is completed, no changes to the nature, amount, or location of the discharge of stormwater from the Project Site are anticipated.

Policy 38

The quality and quantity of surface water and groundwater supplies will be conserved and protected, particularly where such waters constitute the primary or sole source of water supply.

Consistent: The Proposed Project will have no impact on the quality or quantity of surface or groundwater supplies.

Policy 39

The transport, storage, treatment and disposal of solid wastes, particularly hazardous wastes, within coastal areas will be conducted in such a manner so as to protect groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural land, and scenic resources.

Consistent: The Proposed Project is not anticipated to have any adverse impact on the transport, storage, treatment or disposal of solid wastes, including hazardous wastes. All material storage (permanent or temporary) and delivery, for hazardous wastes and otherwise, will continue to meet or exceed all local, state, and federal requirements during and following construction. Finally, the Proposed Project will decrease the potential for solid and hazardous wastes to be accidentally released during flood events by increasing the ability of the Project Site to withstand future flood events.

Policy 40

Effluent discharged from major steam electric generating and industrial facilities into coastal waters will not be unduly injurious to fish and wildlife and shall conform to state water quality standards.

N/A: This policy is not applicable to the Proposed Project as the Project Site does not currently contain a major steam electric generating or industrial facility, nor is one proposed.

Policy 41

Land use or development in the coastal area will not cause national or state air quality standards to be violated.

Consistent: The Proposed Project, and its construction, will not cause national or state air quality standards to be violated. The Project Site currently holds a State Facility air permit for on-site generators and is currently in compliance with the requirements of that permit. The Subgrantee will apply for, and comply with, all permits required for the changes to on-Site emission sources as part of the Proposed Project. Finally, emissions from equipment and deliveries associated with the construction of the Proposed Project will not cause national or state air quality standards to be violated.

Policy 42

Coastal management policies will be considered if the state reclassifies land areas pursuant to the prevention of significant deterioration regulations of the federal clean air act.

N/A: This policy is not applicable to the Proposed Project as it does not propose reclassifying land areas pursuant to the federal Clean Air Act.

Policy 43

Land use or development in the coastal area must not cause the generation of significant amounts of acid rain precursors: nitrates and sulfates.

Consistent: The Proposed Project is not anticipated to cause the generation of significant amounts of acid rain precursors, including nitrates and sulfates.

Policy 44

Preserve and protect tidal and freshwater wetlands and preserve the benefits derived from these areas.

Consistent: The Proposed Project will not directly or indirectly affect tidal or freshwater wetlands or NYSDEC-regulated wetland adjacent areas. There are no National Wetland Inventory (NWI) or NYSDEC-mapped wetlands, or regulated wetland adjacent areas on the Project Site. The Proposed Project would conform to all applicable State and local regulations regarding wastewater and stormwater discharge, and would include measures to improve stormwater management on the Project Site, therefore wetlands off-site, such as the East River, will not be directly or indirectly impacted by the Proposed Project.

STATE OF NEW YORK
DEPARTMENT OF STATE
ONE COMMERCE PLAZA
99 WASHINGTON AVENUE
ALBANY, NY 12231-0001

ANDREW M. CUOMO
GOVERNOR

CESAR A. PERALES
SECRETARY OF STATE

April 27, 2015

Mr. John Dawson
U.S. Dept. of Homeland Security
FEMA-4085-DR-NY
Sandy Recovery Office, Forest Hills Tower
118-35 Queens Blvd., 5th Floor, EHP
Forest Hills, NY 11375

Re: F-2015-0276 (FA)
Federal funding – New York City Health and Hospitals Corporation (HHC) - Comprehensive flood mitigation project for Metropolitan Hospital Center (MHC)
City of New York, NY

Concurrence - No Objection to Funding

Dear Mr. Dawson:

The Department of State received the information you submitted regarding the above matter. The Department of State has no objection to the use of FEMA Public Assistance Program funds for this financial assistance activity to the New York City Health and Hospitals Corporation (HHC) for the above-listed activities.

This concurrence pertains to the financial assistance for this project only. If a federal permit or other form of federal agency authorization is required for the above activities, the Department of State will conduct a separate review for those permit activities. In such a case, please forward a copy of the federal application for authorization, a completed Federal Consistency Assessment Form, and all supporting information to the Department at the same time it is submitted to the federal agency from which the necessary authorization is requested.

When communicating with us regarding this matter, please contact Jeffrey Zappieri at (518) 474-6000 and refer to our file #F-2015-0276 (FA).

Sincerely,

Jeffrey Zappieri
Supervisor, Consistency Review Unit
Office of Planning and Development

JZ/ts

Appendix D
Correspondence 5.8-1
SHPO Consultation

U.S. Department of Homeland Security
Federal Emergency Management Agency
NY Sandy Recovery Field Office DR-4085
118-35 Queens Boulevard
Forest Hills, NY 11375

May 15, 2015

Ruth Pierpont
Deputy State Historic Preservation Officer
Division for Historic Preservation
Peebles Island State Park
P. O. Box 189
Waterford, NY 12188-0189

FEMA: Section 106 Consultation, FEMA-DR-4085-NY, Hurricane Sandy
Applicant: NYC Health and Hospitals Corporation (HHC)
Undertaking: Repairs and Mitigation Work at Metropolitan Hospital Center
Address: 1901 First Avenue, Manhattan, New York
County: New York County

Dear Ms. Pierpont:

The Federal Emergency Management Agency (FEMA) will be providing funds authorized under the Robert T Stafford Disaster Relief and Emergency Assistance Act, P.L. 93-288, as amended, in response to the major Disaster Declaration for FEMA-4085-DR-NY, dated October 28, 2012, as amended. FEMA is continuing Section 106 review for the above referenced Undertaking.

As a result of the damage caused by Hurricane Sandy in New York, catastrophic loss across the City of New York and surrounding counties occurred, leaving many residents without homes or basic city services. In response, FEMA is committed to moving forward as quickly as possible to help these communities recover from the effects of this devastating weather event.

Project Information
The Metropolitan Hospital Center (MHC) is located on a superblock bounded by Second Avenue, E. 99th Street, First Avenue, and E. 97th Street (40.784740, -73.944069). The surrounding East Harlem neighborhood is predominantly residential. The MHC campus contains:

- The Main Building: an 18-story building located in the center of the campus that contains the majority of the hospital facilities, including the Emergency Department (ED), surgical suites, and the intensive care unit (ICU).
- The Mental Health Building (MHB): a 14-story building located at the northwest corner of the campus along E. 99th Street that contains in-patient/out-patient mental health/substance abuse treatment facilities.
- The Outpatient Diagnostic Building: an 8-story building located on the western side of the campus along Second Avenue that contains outpatient clinics, support spaces, and offices.

Hurricane Sandy caused both wind and flood related damage to MHC; peak flood depth at the nearest high water mark was 10.9 feet NAVD88 and at the nearest gauge measurement was 11.2 feet NAVD88. Due to the loss of utility power, the hospital operated under emergency power, with emergency protective measures (including sandbag berms and pumps) preventing floodwater entry into many critical areas. Despite the protective measures, floodwater caused the failure of one of the emergency generators, temporarily causing the loss of all power to the ICU and the data center. Although MHC was not evacuated, the loss of power in the ICU required the relocation of critical life supported patients to another part of the hospital. In addition, MHC began receiving patients evacuated from Bellevue Hospital and could not receive patients in the ED for a short period of time due to the shortage of staff and beds. MHC returned to normal operations in February 2013, three months after the storm, when Bellevue Hospital reopened.

The Metropolitan Hospital was founded in 1875 by the New York Department of Public Charities and Corrections, as the Homeopathic Hospital on Ward's Island. Affiliated with the New York Homeopathic Medical College (a/k/a the New York Medical College), it is known as the oldest partnership between a hospital and a private medical school in the United States. In 1894, the hospital moved to its second location on Blackwell's Island and was renamed the Metropolitan Hospital. By 1907, the hospital had grown to more than 1300 bed capacity and was the largest general hospital in the U.S. The third and final location was dedicated in 1955 with two buildings, and the addition of the Mental Health Building in 1966.

Since Hurricane Sandy, several storm-related repairs have been made to MHC to bring the hospital back to a state of good repair (mold and asbestos removal/abatement; roof, fence, mechanical and electrical repairs; and replacement of damaged surfaces, equipment, or furnishings).

Description of Undertaking

A perimeter flood protection system would surround the MHC campus. Designed to the 0.2 percent annual probability ("500-year") flood elevation plus three feet of freeboard for sea level rise, it would include floodwalls along the open portions of the campus' perimeter and strengthening of the basement walls of the MHB at the northwest corner of the campus. Flood proof doors would be installed at several locations along the first floor, with vehicular and pedestrian floodgates provided to access the hospital. The tunnel between the MHB and the Main Building along E. 99th Street (which carries high pressure steam piping, chilled water piping, and electrical conduits), would be rebuilt to support the floodwall's weight, and a floodgate would be added by the MHB tunnel access door. Several manholes around the campus perimeter would also be sealed with watertight covers (see Figures 4-1a and 4-1b).

The proposed mitigation measures would include:

- A new storm water piping system along the north and south sides of the hospital campus, along with two submersible flood pump stations, to convey storm water within the perimeter to two new discharge locations to the combined sewer; sump pumps would be installed at low points to collect and remove accumulated storm water. Updates to the existing sanitary sewer system would be made, including disconnecting sanitary fixtures on the first floor and reconnecting them to new sanitary sewer lines on the north and south sides of the hospital, and upsizing existing cellar pumps.
- Deployable flood planks for the loading dock would be placed at both the top and bottom of the loading dock ramp, which would provide a secondary layer of defense.
- Two utility tunnels connected to the boiler/chiller room in the Main Building basement would be sealed to prevent water entry, including installing flood proof doors at the tunnel entrances; a third tunnel would be sealed and abandoned in place.
- The NYC/NYS Emergency Management Chempack Room would be relocated from the Main Building's basement to the first floor; to accommodate the Chempack Room, the vacated paramedics/ambulance quarters would be renovated to provide the required waterproofing, security measures, and climate control.

Area of Potential Effects (APE)

Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the undertaking may directly or indirectly affect historic resources. Based on the proposed scope of work, FEMA has determined that the APE for this undertaking will be the view shed of MHC and any additional architectural resources within an approximate 500-foot radius from the center of the MHC site.

The APE for archaeological resources includes any land surface that may be altered during the course of project construction. Such impacts associated with the HMP includes subterranean disturbances most associated with the

installation of the perimeter flood protection system including floodwalls along the open portions of the campus' perimeter, a new storm water piping system along the north and south sides of the hospital campus, and new sump pumps and associated utilities for such improvements. Thus, the APE for archaeological resources is limited to the area of proposed ground disturbance.

Evaluation of Historic Significance

FEMA Historic Preservation Specialist Tracy Dean conducted a search for historic properties using the National Register of Historic Places (NRHP) online database, NY SHPO Cultural Resource Information System (CRIS), Historic Aerials website, Google Earth satellite and street views, and listings of NYC Landmarks and Historic Districts to determine if any buildings are listed on or determined eligible for listing on the State and National Registers of Historic Places individually or within historic districts. Based on the results of known historic standing structures within the APE, the Metropolitan Hospital (USN#06101.018493), with an address at 1901 First Avenue, is listed in NY SHPO's CRIS database as not eligible for inclusion on the NRHP. Also within the APE, three properties have been reviewed by the NY SHPO: Draper Hall (USN#06101.018975) 1918 First Avenue; J.H.S. 99 (USN#06101.015231) 410 E. 100th Street; and Co-op Technical High School (USN#06101.017925) 321 E. 96th Street and each have been determined not eligible for the NRHP. There are no designated historic districts, scenic landmarks, landmarks or landmark interiors within the view shed of MHC. However, 343 E. 99th Street is located within the APE and is more than 45 years of age (40.785668, -73.943965). Owned by the NYC Sanitation Department, the building is located on the north side of E. 99th Street, across from MHC. The turn of the century brick building is divided into four bays with four separate stepped parapet walls. Each bay has an industrial garage door opening; however, the opening on the bay closest to First Avenue has been in-filled with cinder block and metal door. Although 343 E. 99th Street meets the age requirement, it does not possess any characteristics or integrity to qualify for inclusion in the National Register; therefore, FEMA has determined that 343 E. 99th Street is **not eligible** for listing on the NRHP.

Evaluation of Archaeological Impact

FEMA Archaeologist Brock Giordano, RPA conducted a search using NY SHPO's CRIS for areas of archaeological sensitivity and known archaeological sites. Additional research was conducted using records, maps, and previous cultural resources management reports located on CRIS. Research revealed there are no known prehistoric and/or historic archaeological sites eligible for, or listed in, the NRHP within and/or adjacent to the APE. One previously recorded prehistoric site was identified within one-half mile of the APE. Recorded in 1922, the Rechewanis/Konaande site is located approximately 1,400 feet west of the APE and is recorded as the contact-period Native American village site. While this site may have been preserved, the likelihood of associated intact deposits located within the APE are low based on the substantial ground disturbing activities that have taken place since it was located in the early 20th century.

Review of historic maps including topographical and historic aerials beginning in the early-19th century extending to present, reveal that hospital campus was constructed beginning in the 1950s which resulted in substantial earth moving practices including grading and filling. Historic archaeological resources pre-dating construction of the facility are considered low due to lack of documented development.

Soils within the southern and eastern portion of the hospital campus are classified as ULA (urban land-Laguardia complex, 0 to 3 percent slopes), while soils in the northwestern portion of the APE are classified as UrA (urban land, reclaimed substratum, 0 to 3 percent slopes). Soils within these areas are generally covered in pavement, concrete, buildings, and other structures underlain by disturbed and natural soil. The so-called Urban Land category includes most of what normally would be considered developed land. Residential areas, commercial areas, services and institutions, industrial areas, and those developed for transportation and utilities are the primary land uses included in the Urban category. Review of the historical topographical mapping indicates that the APE was previously marshland, and included streams that drained towards the East River. This area is shown to have extended as far south as E. 91st Street, as far north

as E. 104th Street, and as far inland as Third Avenue. Historic borings from the WPA (as described above) include some of the original borings made at the site for the "Harlem Hospital" and reveal the upper 20 to 30 feet of soil comprises miscellaneous fill underlain by 10 to 15 feet of organic soils. Below the fill and organic soils, more competent soils, typical of glacial deposits, are found. Bedrock beneath the site is estimated to be between 100 and 150 feet below existing ground surface, with the top of rock sloping eastward to the East River.

Overall, the vertical and horizontal limits of disturbance will be limited to areas that have been previously disturbed by the construction of the existing structures and will be located within the limits of previously disturbed urban soils. The only evidence of Native American activity that might be located within the APE would be random, sparsely distributed artifacts. Therefore, based on the environmental and topographic conditions, the potential for encountering in-situ prehistoric archaeological resources is considered low. Therefore, FEMA has determined that the undertaking has a low probability to encounter archaeological sites that are eligible for listing in the NRHP.

Determination of Effect

Based on the information presented above, FEMA has determined that the Undertaking's determination of effect is **No Historic Properties Affected** that are either in, or eligible for inclusion in, the State or National Register of Historic Places. We request concurrence with this determination of effect within fifteen (15) calendar days. Should you need additional information please contact Tracy Nelson, SHPO Liaison, at (504) 430-9041.

Sincerely,

BROCK A GIORDANO

Digitally signed by BROCK A GIORDANO
DN: c=US, o=U.S. Government, ou=Department of Homeland Security, ou=FEMA, ou=People, cn=BROCK A GIORDANO, 0.9.2342.19200300.100.1.1=0296759531.FEMA
Date: 2015.05.14 11:27:06 -04'00'

For,

John Dawson
EHP Branch Director
4085-DR-NY

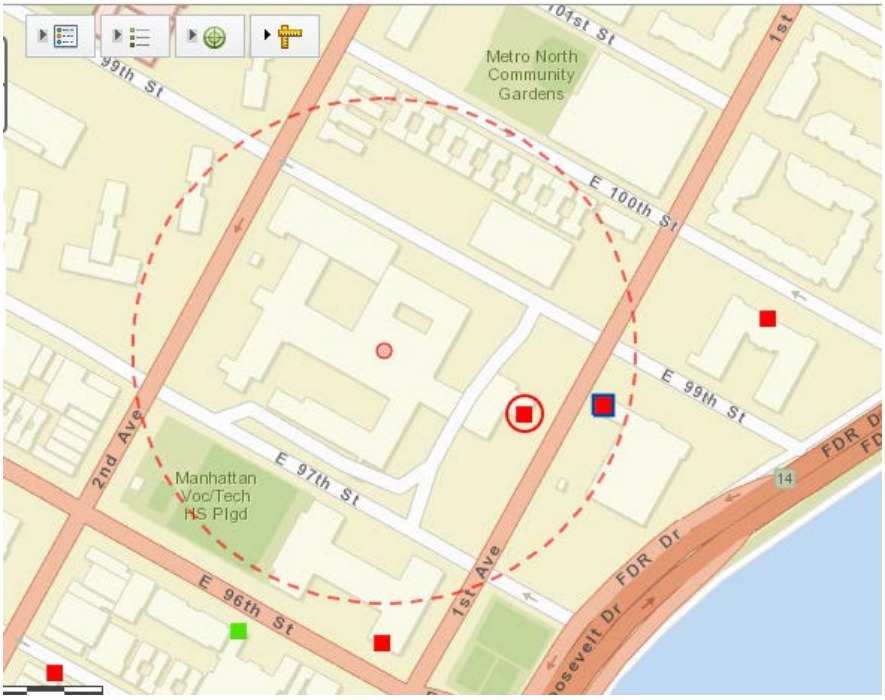
JD/td

cc: Rick Lord, NYS Division of Homeland Security & Emergency Services
Gina Santucci, Landmarks Preservation Commission

Enclosures: MHC Map Index
MHC Photo Index (2)
EA_Metropolitan_Figure 4-1a
EA_Metropolitan_Figure 4-1b_Proposed Alternative

Photo Page Disaster 4085-DR-NY
Metropolitan Hospital Center (MHC) –Maps

MHC, Location of Undertakings- APE 500 foot radius (CRIS)



MHC, New York County, NY – Location, Google Earth

Photo Page Disaster 4085-DR-NY
Metropolitan Hospital Center –Photos

Street View with 343 E. 99th Street on right and MHC on left

Front façade of 343 E. 99th Street (bays 1-3)

Photo Page Disaster 4085-DR-NY
Metropolitan Hospital Center –Photos

Front façade of the first bay of 343 E. 99th Street

Front bays (2, 3 and 4) of 343 E. 99th Street