

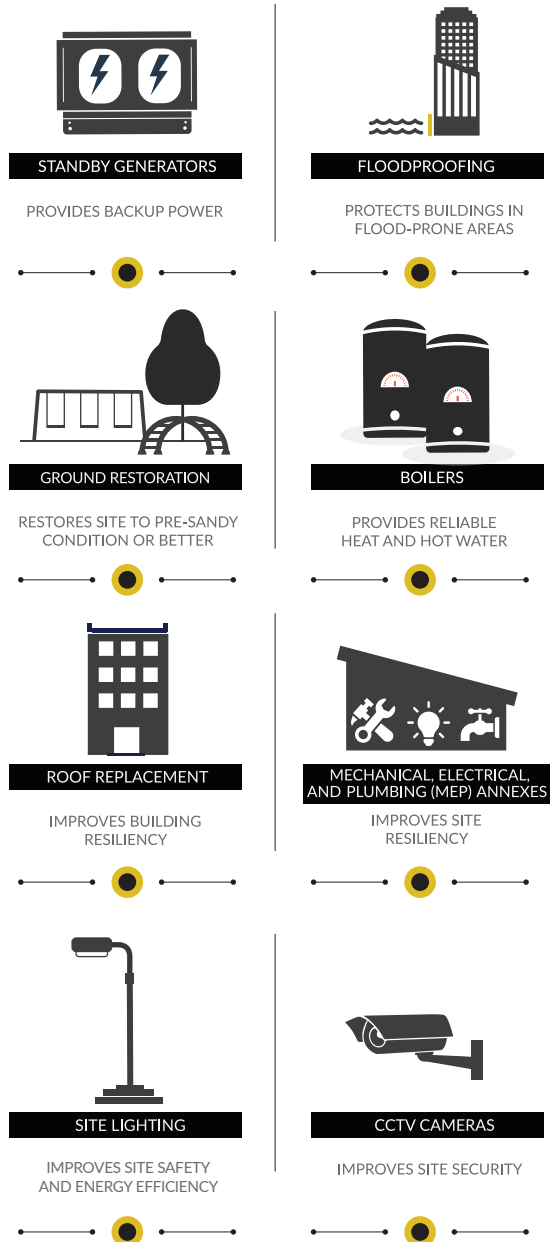
Recovery & Resilience

In October 2012, Superstorm Sandy hit New York City, inundating large parts of the city with saltwater and leaving lasting damage to buildings and infrastructure. Thirty-five New York City Housing Authority (NYCHA) developments, home to over 60,000 New Yorkers, suffered major storm-related damage. NYCHA is investing over \$750M at the nine developments located in Coney Island.

Coney Island Progress as of Q1 2024

5	Sites substantially complete
5	Sites with boilers operational
20	Generators started
224	CCTV cameras operational
52	Hot water heaters installed
25	Entrances with layered access security controls installed
36	New utility buildings/additions constructed
37	Roofs replaced
9	Playgrounds renovated

Scope of Work



NYCHA CONEY ISLAND CAMPUSES



RECOVERY & RESILIENCE
NYCHA'S SUPERSTORM SANDY RECOVERY PROGRAM

NYCHA Recovery & Resilience Department
Questions/Problems, 疑问/家里的问题, Вопросы/Проблемы, Preguntas/Problema
(212) 306-8532 — disaster.recovery@nycha.nyc.gov
tinyurl.com/SANDYRECOVERY



RECOVERY & RESILIENCE
NYCHA'S SUPERSTORM SANDY RECOVERY PROGRAM

1 Coney Island 1B (Unity Towers)

2007 Surf Avenue

Site Flood Zone: AE | Base Flood Elevation: +11 feet

- **Flood-resistant annex** located at the north end of the site adjacent to W 20th Street. The two-story building features two dual fuel boilers and one 450 kW natural gas-powered standby generator to service 192 apartments. Additional annex details:

- Height: 50'
- Square footage: 4,235
- Facade: Glazed brick

- **Additional site resiliency measures:**

- 50 deployable flood barriers across 10 locations
- Four new backwater valves
- New cold liquid-applied roofing system

2 Carey Gardens (Under Construction)

2945 West 23rd Street (Multiple Addresses)

Site Flood Zone: AE | Base Flood Elevation: +11 feet

- **Community Services Center with flood resistant central heating plant.** The building stretches from W 24th Street to W 23rd Street by Mermaid Avenue and will house five 500 kW standby generators, three dual fuel boilers, daycare and community spaces, offices, and a rooftop basketball court and community garden. Additional building details:

- Height: 70'
- Square footage: 58,403
- Facade: Terracotta rainscreen, aluminum curtain wall

- **Additional site resiliency measures:**

- Bioswales across the campus to control stormwater runoff

3 Haber Houses

3018 West 24th Street (Multiple Addresses)

Site Flood Zone: AE | Base Flood Elevation: +11 feet

- **Wet and dry flood-proofing measures** across the site include flood vents to allow for the controlled flooding of unoccupied spaces in the existing buildings. Other spaces, such as building lobbies, will be dry flood-proofed via deployable barriers and structural reinforcement of the floors and walls. 619 wet and dry flood-proofing components will be installed or deployed at 58 locations across the site.

Haber Houses (continued)

- **Flood-resistant annexes** located next to all three residential buildings between W 24th and W 25th Street. Each one-story annex will house one 350 - 450 kW natural gas-powered generator, automatic transfer switch equipment, and domestic water heaters to service the adjacent residential building. The annex next to 3031 W 25th Street also includes two dual fuel, 250 horsepower boilers to service all residential buildings. Additional annex details:

- Average height: 38'
- Average square footage: 2,817
- Facade: *Dri-Design* aluminum panels

- **Additional site resiliency measures:**

- New cold liquid-applied roofing system at all buildings
- Six new backwater valves

4 Coney Island I (Sites 4 & 5)

2948 West 28th Street (Multiple Addresses) | Site Flood Zone: AE | Base Flood Elevation: +11 feet

- **Flood-resistant heating plant** housing two new boilers, two hot water heaters, and office space. Additional building details:

- Height: 27'
- Square footage: 3,538
- Facade: Glazed brick, concrete with architectural textured formed surface, cast stone

- **Additional site resiliency measures:**

- Two flood-resistant utility annexes holding automatic transfer switch equipment to detect any loss of normal utility service and signal the generators to start within 60 secs.
- 202 passive and deployable floodproofing components across 31 locations, including backwater valves to limit the likelihood of building sewage backup.
- Two 500 kW natural-gas powered rooftop generators in custom acoustical enclosures mounted on dunnage platforms.



RECOVERY &
RESILIENCE

HOUSING AUTHORITY

5 Coney Island Houses

3028 West 29th Street (Multiple Addresses)
Site Flood Zone: AE | Base Flood Elevation: +11 feet

- **Flood-resistant electrical annexes** located next to four of five residential buildings beginning at W 29th Street. Each annex stands at 30 ft and includes automatic transfer switch equipment that will detect any loss of normal utility service and signal the rooftop generators to start within 60 secs to power each residential building.
- **Boiler plant and multipurpose space** by 3020 Surf Avenue between W 30th and W 31st Street. The new plant stands at 62 ft at its highest point and includes three dual fuel boilers, a multipurpose space with pantry, and 1836 sq. ft. of green roofing. The final location of the building was selected with input from Coney Island Houses residents.
- **Additional site resiliency measures:**
 - Five 350 - 500 kW natural gas-powered rooftop generators resting on steel platforms anchored to the existing building columns
 - 628 deployable flood-proofing components at 111 locations across the site
 - Water-proofing and structural reinforcement of all building perimeters

6 Coney Island Sites (Under Construction)

O'Dwyer Gardens, Surfside Gardens, Coney Island Site 8
3018 West 24th Street (Multiple Addresses)
Site Flood Zone: AE | Base Flood Elevation: +11 feet

- **Flood-resistant utility annexes** located across the campus from W 31st to W 35th Street. The six structures feature insulated metal panel façades in shades of brown, as selected by residents, and will hold varying equipment above the FEMA flood level to service 12 residential buildings, including but not limited to:
 - 14 total natural gas-powered generators ranging from 350 to 400 kW in custom acoustical enclosures mounted on dunnage platforms
 - Burnham dual fuel boilers, domestic hot water heaters and oil tanks
- **Nine repurposed apartments** above the flood level housing automatic transfer switch equipment to detect any loss of normal utility service and signal the generators to start within 60 secs.
- **New/renovated play areas** totaling 15,275 sq. ft.
- **Additional site resiliency measures:**
 - 236 floodproofing components including AquaFence flood barriers

7 Gravesend Houses

3225 Neptune Avenue (Multiple Addresses) | Site Flood Zone: AE | Base Flood Elevation: +11 feet

- **Flood-resistant generator and heating plant** (2719 W 33rd Street) featuring a green roof and housing eight natural gas-powered generators and three boilers to service all Gravesend buildings.
- **Additional building details:**
 - Height: 33'
 - Square footage: 4,842
 - Facade: Glass fiber reinforced concrete, metal panel, brick
- **Flood-resistant utility annexes** adjacent to each residential building (14 total) to hold electrical equipment including but not limited to automatic transfer switch equipment to detect any loss of normal utility service and signal the generators to start within 60 secs.
- Additional building details:
 - Average height: 21'
 - Average square footage: 655
 - Facade: Brick, metal panel
- **Additional site resiliency measures:**
 - 15 underground stormwater management drywells (approximate sizes: 10'x15' and 15'x38') throughout the site to manage stormwater runoff and lessen the likelihood of flooding
 - 1800 passive and deployable floodproofing components across 259 locations, including building entrance and window flood logs
 - Reinforcement and waterproofing of building perimeters and crawlspaces to better protect against structural damage from hydrostatic pressure during flood events



Coney Island Houses Boiler Plant



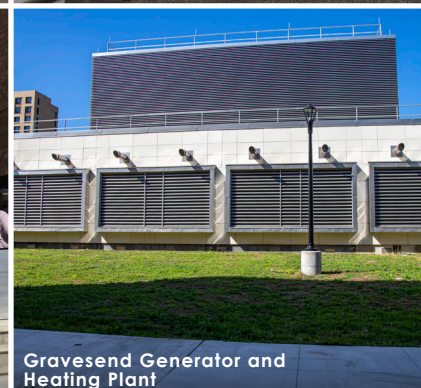
Coney Island I (Sites 4 & 5)
Rooftop Standby Generator



Coney Island Houses Boilers



Coney Island 18 (Unity Towers)
Floodproofing



Gravesend Generator and
Heating Plant



Haber Houses Annex