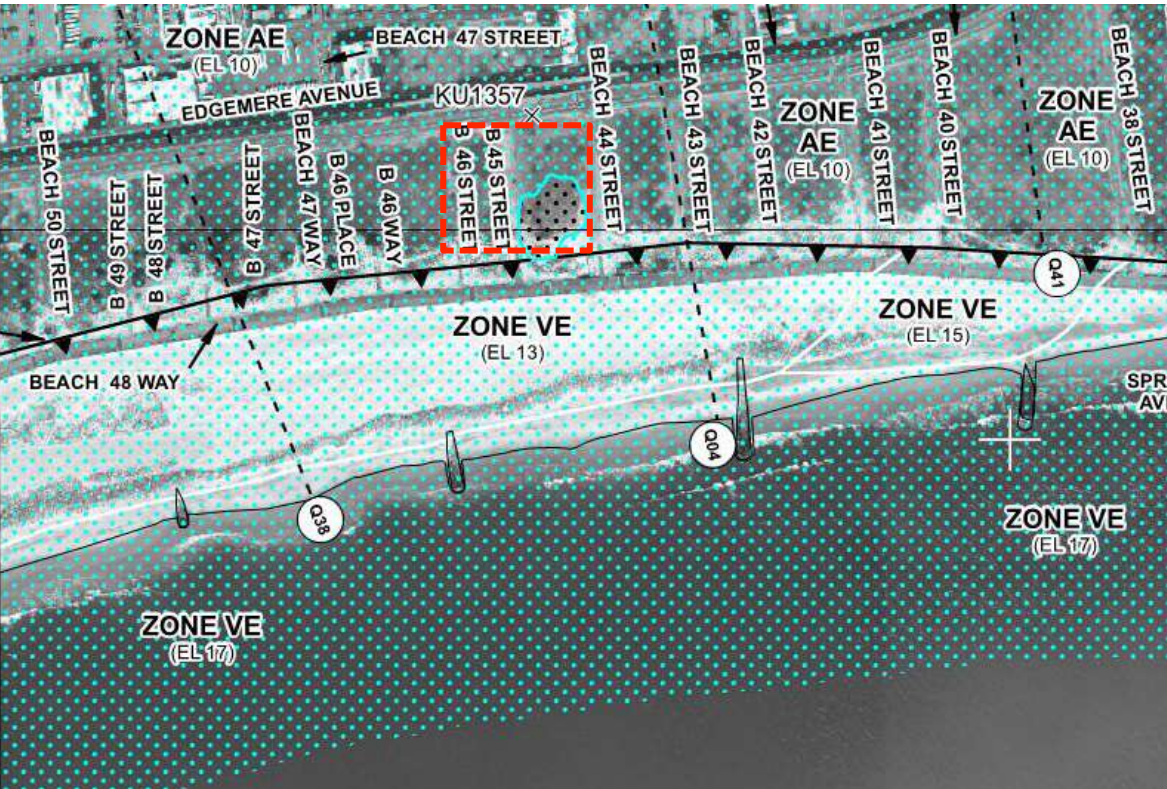




- 101 Unit affordable units and small commercial space
- \$32.7 million construction cost
- Construction Completed Summer 2017
- HPD/Enterprise project
- Passive House/NYSERDA standards



Sustainability Goals



RESILIENCY

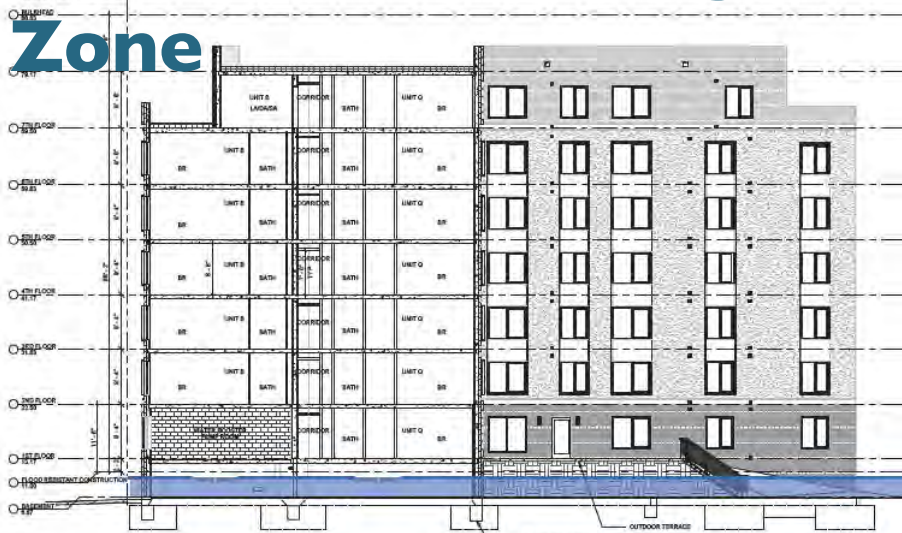
Protect against flooding during storm events and future sea-level rise

REDUCE CARBON FOOTPRINT

Utilizing Passive House modeling and guidelines to building a highly efficient building

- Site: Far Rockaway, Queens
- Located in Flood Zone

Resiliency: Building in the Flood



- Raising habitable space above flood plane
- Raising utilities above the flood plane
- Providing emergency power and natural light
- Providing gathering space & egress above the flood plane
- Provide flood relief elements like flood vents and flood barriers
- Daylight corridor and stairwells provide light in case of power outage
- Passive house provides for weathering in place
- Elevator will have control to prevent cab descending into flood waters

Sustainability: Achieving Passive House



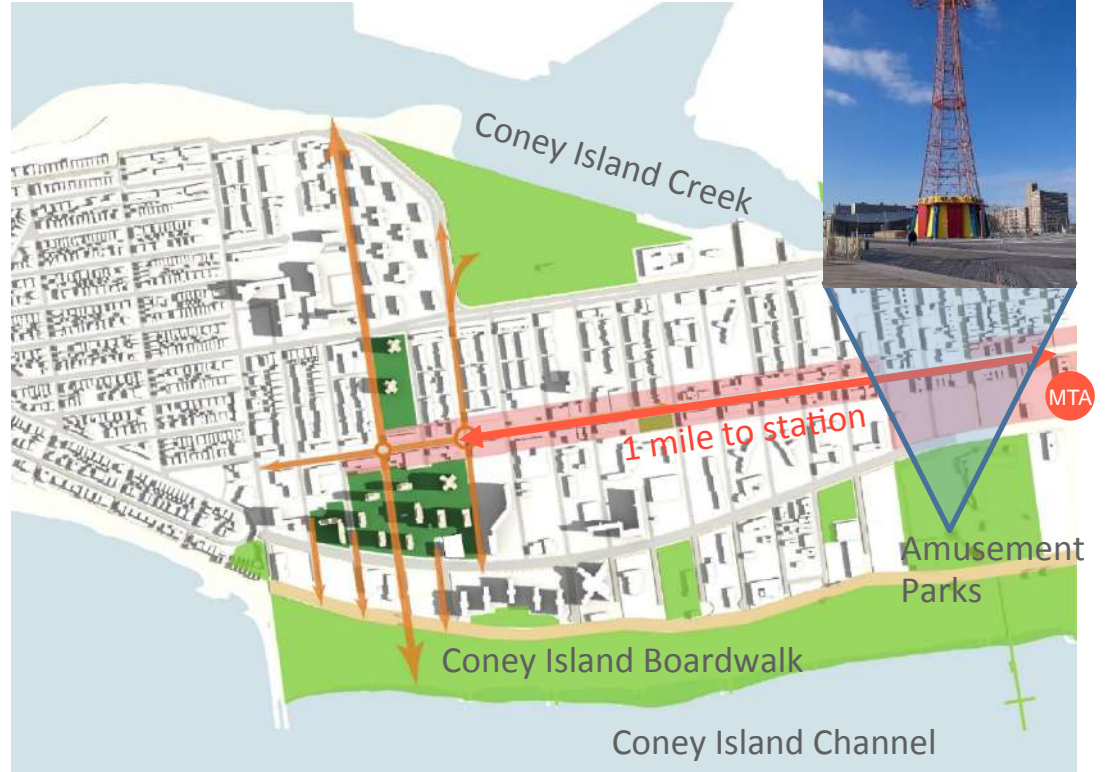
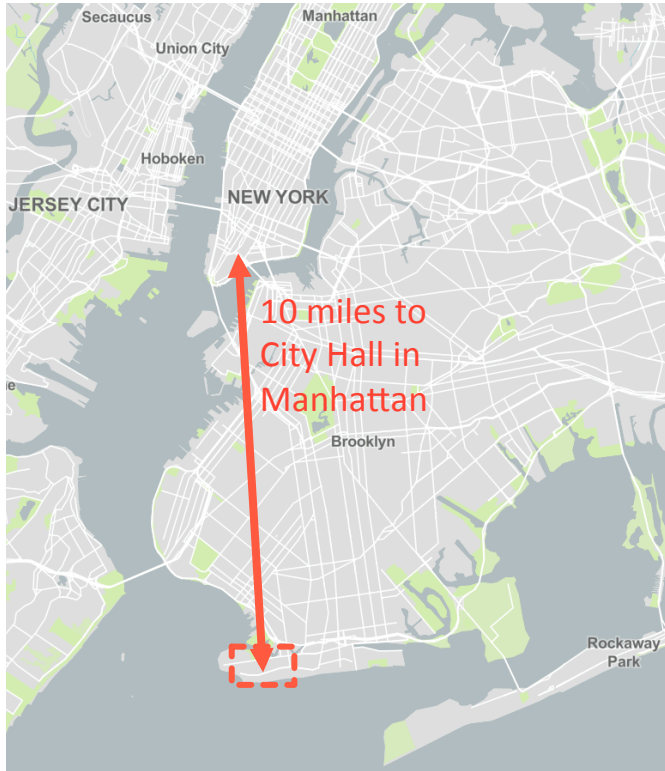
This building will be **the single largest Passive House** multi-family building in the country certified by PHIUS (Passive House Institute of America).

- Super insulated Building Envelope – ICF with 7” EPS – keeps a median temp 40-50 F
- uPVC window has better energy performance
- All LED fixtures
- Energy Star/Water sense fixtures
- Cogen that provide power and hot water
- PV that can provide for backup power
- Mini split heat pump system with air to air energy recovery system

Sandy Resiliency at Coney Island







Coney Island, Brooklyn



Flood Vulnerability



KEY

	ZONE X
	ZONE AE (EL 11)
	ZONE AE (EL 12)
	ZONE VE

Existing Building Entries

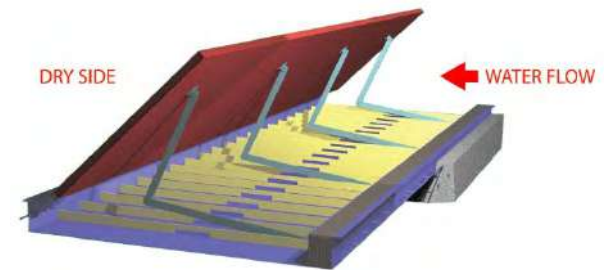
Coney Island Sites



Reinforced Ground Floor Facade



Entryway Self-Actuating Floodgates



Existing Building Entries

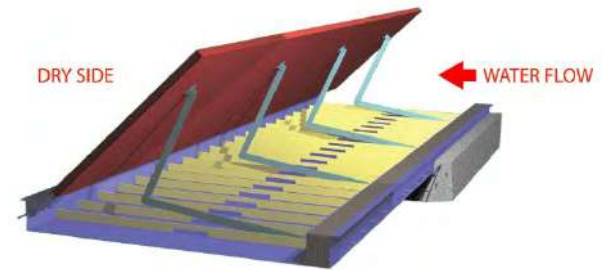
Coney Island Sites



Reinforced Ground Floor Facade



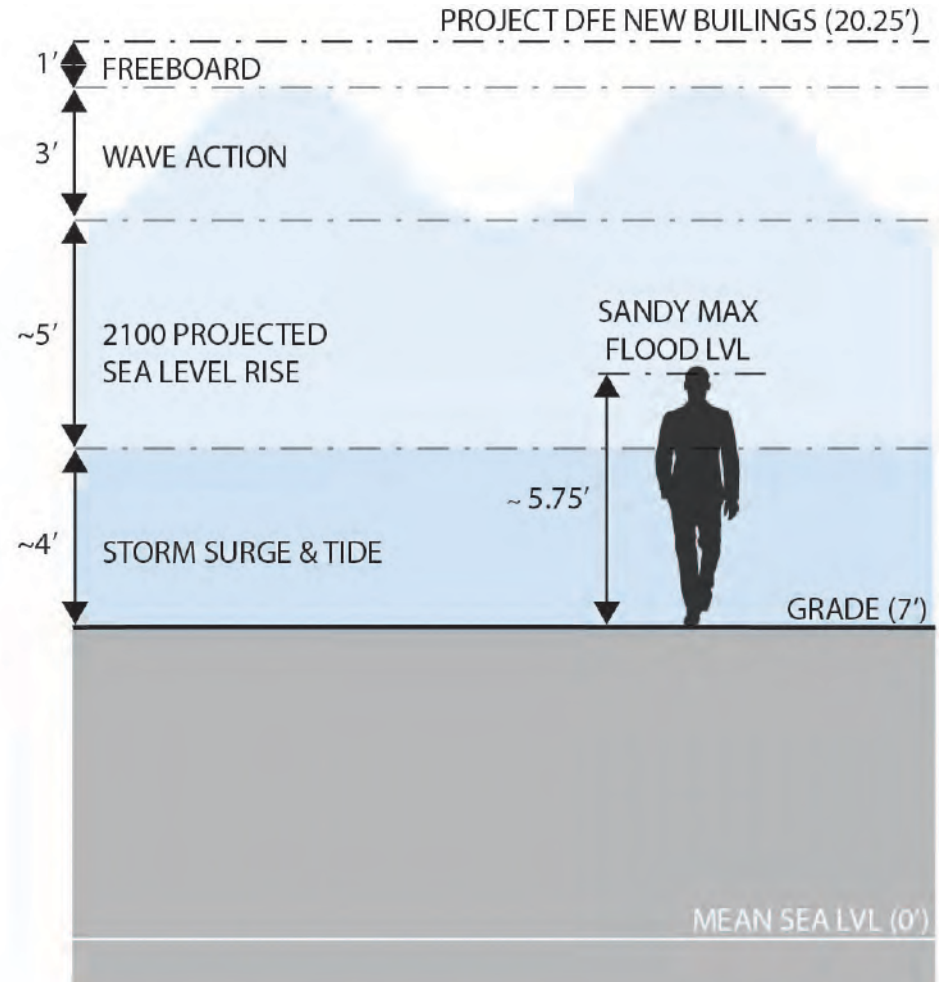
Entryway Self-Actuating Floodgates



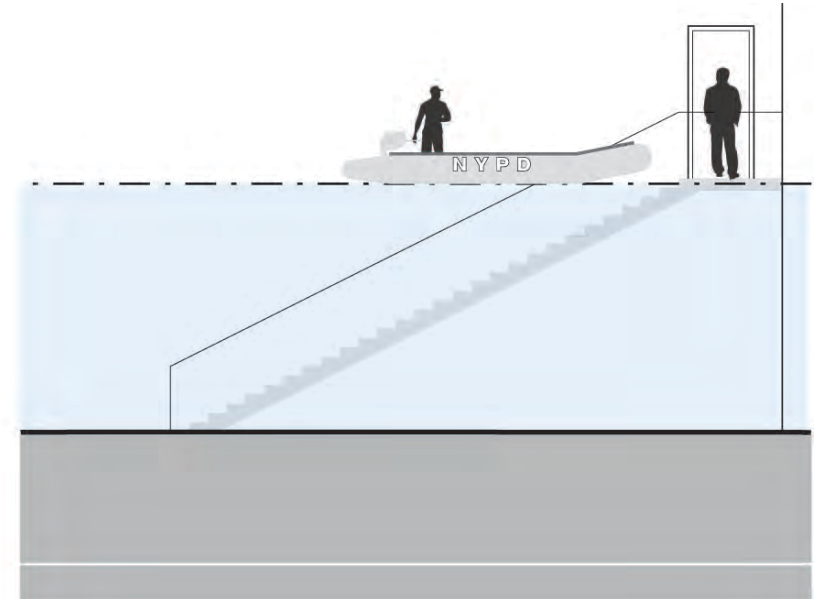
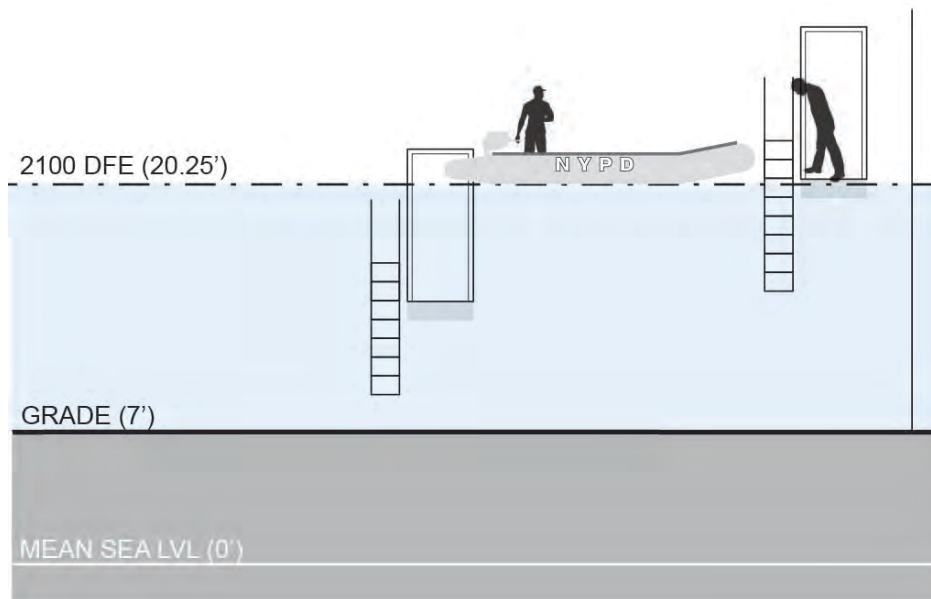
Floodproofing at New Buildings



Photo by Smart Vent



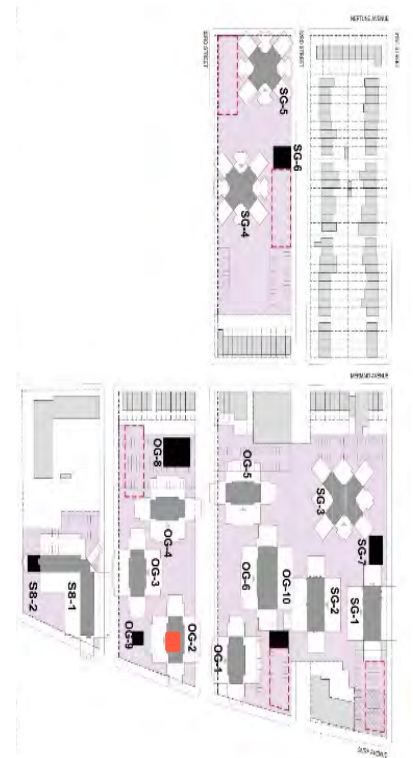
Emergency Access During Flood Events



General Boiler Plant



Remote Service Buildings



BUILDINGENERGY NYC

OCTOBER 12, 2017 • TKP NY CONFERENCE CENTER • NESEA.ORG/BENYC17

Conference + Trade Show of the Northeast Sustainable Energy Association (NESEA)

Beyond Resiliency for NYC Public Housing