## **HUDSON YARDS**

NEW YORK

# ENGINEERED CITY

Hudson Yards will be far more than a collection of tall towers and open spaces. It will be a model for the 21st century urban experience; an unprecedented integration of buildings, streets, parks, utilities and public spaces that will combine to form a connected, responsive, clean, reliable and efficient neighborhood.

### CONNECTED NEIGHBORHOOD

Communications will be supported by a fiber loop, designed to optimize data speed and service continuity for rooftop communications, as well as mobile, cellular and two-way radio communications. This will allow continuous access via wired and wireless broadband performance from any device at any on-site location. We're as good as future-proofed.



Digital antennae service (DAS) for cellular and two-way radio



Rooftop satellite Wireless responders

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IIIIIIIIII Fiber Loop

#### RESPONSIVE NEIGHBORHOOD

Hudson Yards will harness big data to innovate, optimize, enhance and personalize the employee, resident and visitor experience. Supported by an advanced technology platform, operations managers will be able to monitor and react to traffic patterns, air quality, power demands, temperature and pedestrian flow to create the most efficiently navigated and environmentally attuned neighborhood in New York.



Building data-capture sensors (systems, equipment)



Electrical and thermal sub-metering



Environmental sensors (air, noise, other environmental factors)



Advanced technology platform

#### CLEAN + RESPONSIBLE NEIGHBORHOOD .....

Progressive cities are moving toward organic waste separation systems to reduce landfill costs, methane emissions and greenhouse gas emissions. Hudson Yards makes organic waste collection convenient and space efficient by utilizing grinders and dehydrators to reduce food-service waste to 20% of its initial weight and volume.

Additionally, nearly 10 million gallons of storm water will be collected per year from building roofs and public plazas, then filtered and reused in mechanical and irrigation systems to conserve potable water for drinking and reducing stress on New York's sewer system.



Organic-waste disposal system



Stormwater Tank

#### RELIABLE + EFFICIENT NEIGHBORHOOD .....

Whatever the disruption—super storm, brown out—Hudson Yards will have the onsite power-generation capacity to keep basic building services, residences and restaurant refrigerators running. It doesn't hurt that being built above a rail yard means our first level is well above the flood plain.

Hudson Yards' first of its kind microgrid and two cogeration plants will save 24,000 MT of CO2e greenhouse gases from being emitted annually (that's equal to the emissions of ~2,200 American homes or 5,100 cars) by generating electricity, hot and chilled water for the neighborhood with over twice the efficiency of conventional sources.



14.4 megawatts of cogen



15 megawatts of Tier 4 diesel generators



Con Ed Utility Grid





Hot/Chilled water plant



Hot/Chilled water line

