

THE MAKING OF HUDSON YARDS THE PUBLIC SQUARE AND GARDENS – THE SMARTEST PARK IN TOWN

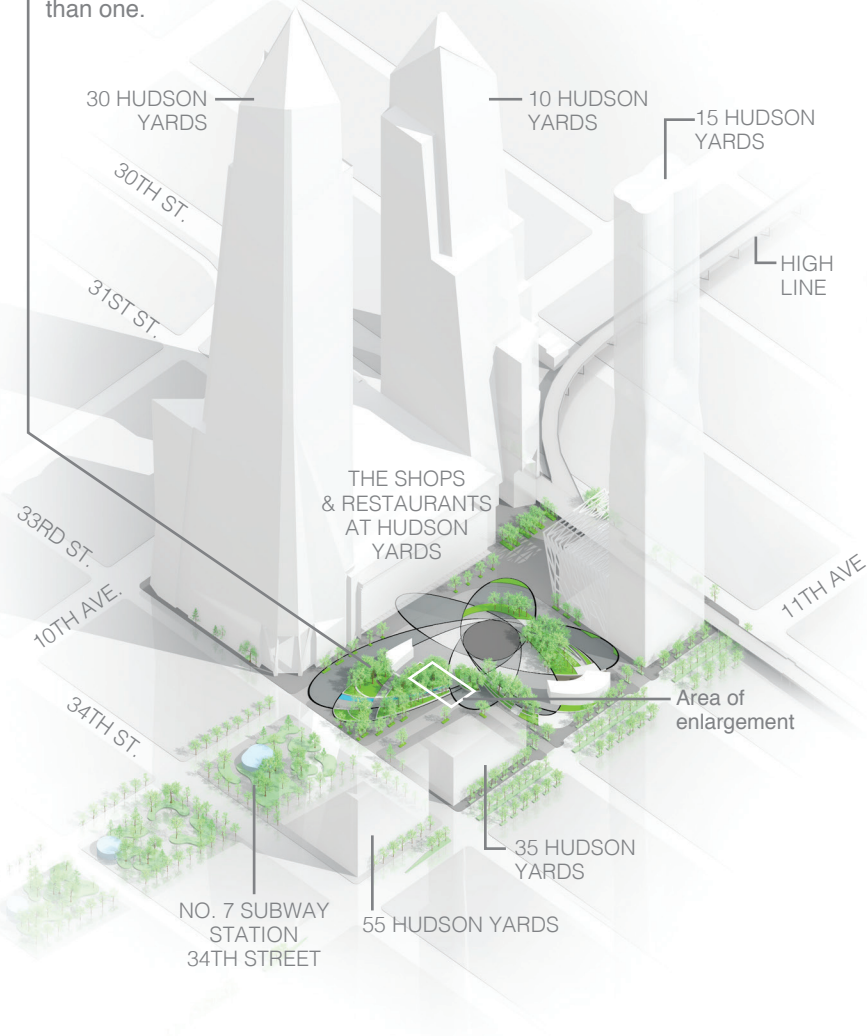
New York's next elevated park growing over the Yards

NEW YORK'S "OTHER" ELEVATED PARK

Built over the rail yards with jet engines, super chilled roots, a forest of trees and smart soil, the Hudson Yards Public Square and Gardens will be a park unlike any other in New York. A sophisticated layer cake of utilities and materials are being employed between the Platform and the Plaza to allow for the lush plantings above. An expansive WiFi system throughout the plaza will ensure that we are a hot spot in more ways than one.

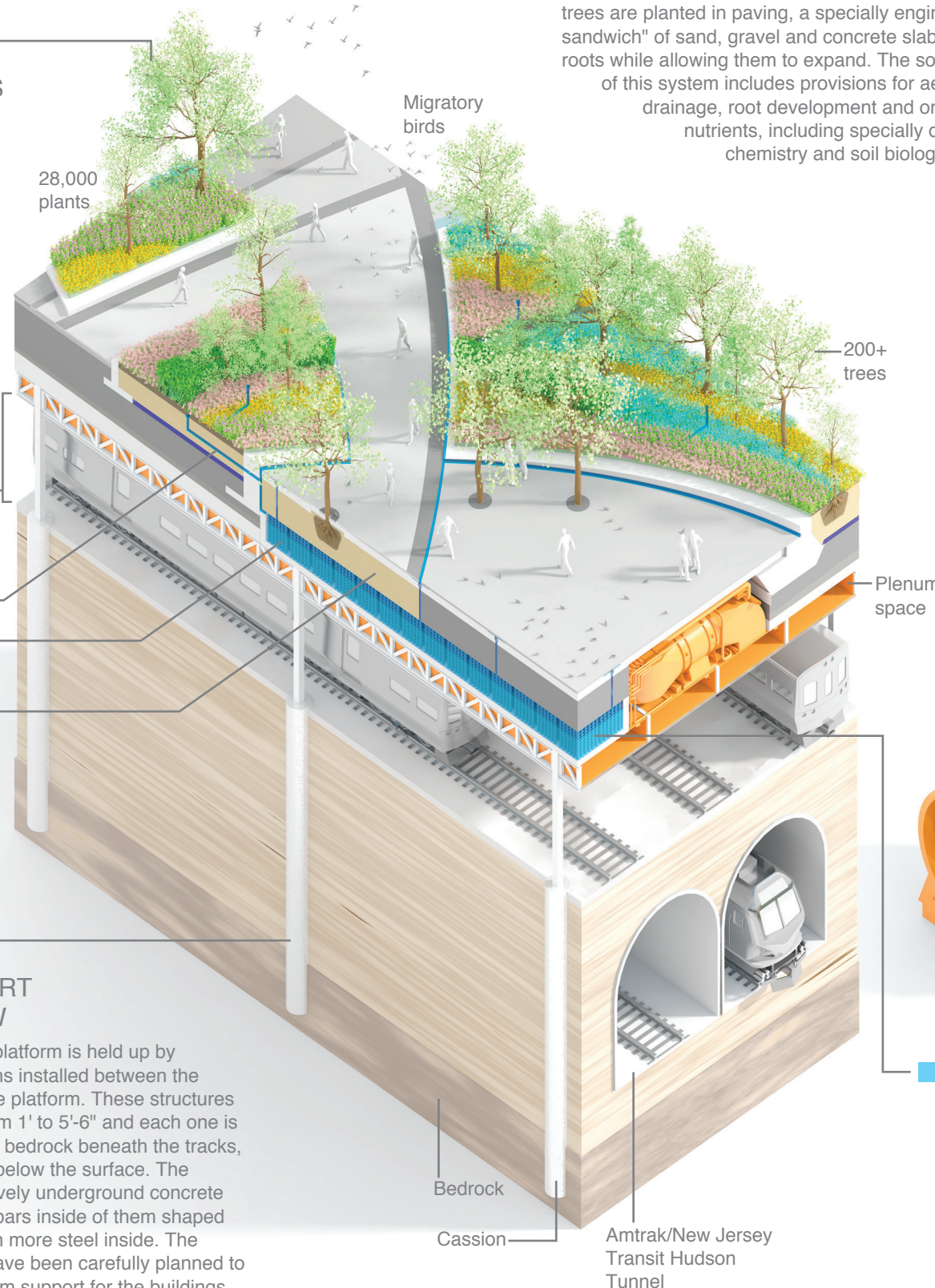
PLANTS, TREES, BIRDS AND BEES

Across the 5 acres, visitors will encounter over 28,000 plants, including a forest of more than 200 mature trees. Like New Yorkers, our plants will be diverse in species and range in size. The large trees and expansive perennial gardens will be home to migratory birds and pollinators. Wildflowers such as Echinacea, Monarda, and Rudbeckia will attract bees, butterflies and hummingbirds, while fruiting trees and shrubs including Serviceberry, Spicebush and Winterberry will attract birds such as Warblers, Sparrows and American Redstarts to Hudson Yards.



DEEP SUPPORT FROM BELOW

The entire 10 acre platform is held up by hundreds of caissons installed between the tracks to support the platform. These structures vary in diameter from 1' to 5'-6" and each one is drilled deep into the bedrock beneath the tracks, averaging over 40' below the surface. The caissons are effectively underground concrete columns with steel bars inside of them shaped like cages with even more steel inside. The caisson locations have been carefully planned to provide the maximum support for the buildings above while avoiding conflicts with the existing tracks and utilities below.

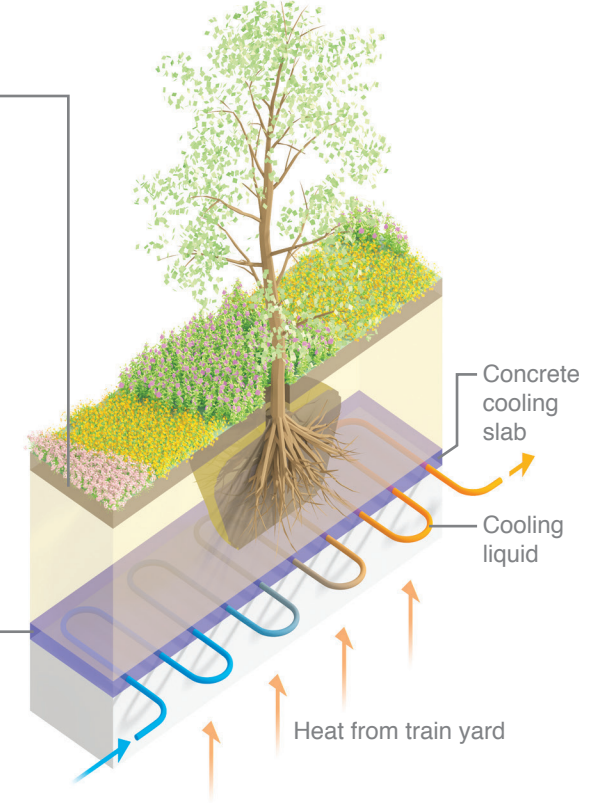


THE SMARTEST SOIL IN TOWN

With a soil depth of 18 inches for plants and only 4 feet for large trees, admittedly we are shallow, but self-aware and over-compensating for it. The soils have been specially designed to provide effective drainage and nutrients for the plants and ensure our roots can run wide, if not deep. Where trees are planted in paving, a specially engineered "soil sandwich" of sand, gravel and concrete slab will protect the roots while allowing them to expand. The sophisticated layering of this system includes provisions for aeration, irrigation, drainage, root development and ongoing control of nutrients, including specially designed soil chemistry and soil biology.

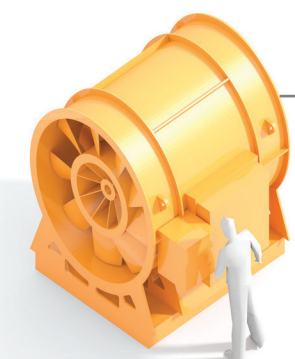
OUR ROOTS ARE COOL, OUR PLANTS ARE PAMPERED

The heat from the train yard below can reach up to 150 degrees, too hot for our city trees. Therefore, AC is in order to keep the roots of our trees and plants healthy. A sophisticated network of tubing is being embedded within the concrete slab to circulate cooling liquids that maintain optimal conditions for our plant's roots. This cooling system will protect the roots, from the train heat below and summer heat above, and ensure that the plants and trees at Hudson Yards will be the most pampered in New York City.



WE HAVE BIG FANS, LITERALLY!

A ventilation system powered by fans, usually found in jet engines, will remove the heat generated from the train equipment below by covering the rail yards. Consisting of 15 large fans, this ventilation system supplies fresh air at 45 MPH to the track level.



RAIN, RAIN, (DON'T) GO AWAY!

Every drop of rainwater that falls on Hudson Yards will be collected into a 60,000 gallon tank and used for irrigating our plants and trees. This collection saves space in the NYC sewer system and helps keep the Hudson River clean. We also save 6.5 megawatt hours of energy and offset 5 tons of greenhouse gas (GHG) every year by collecting our own water. That GHG savings, combined with the savings from diverting the water from NYC treatment plants, is equivalent to the carbon output over 4 acres of forest!

