Adaptive Strategies

A smart city is dynamic and adaptive. It is democratic and pragmatic. The smart city is resilient and accessible. It leverages technology and infrastructure to create a more efficient and sustainable environment. The smart city will be networked and communicative, requiring and incentivizing interaction from its denizens. A smart city is not, however, just the sum of its technological parts.

Site + Building

The building seeks to utilize every possible space to implement sustainability features. The rooftop is covered with solar panels that track the sun’s movement. Per current zoning codes, the rooftop will continue to have direct sun exposure despite future development. The building facade is coated with titanium dioxide which, when exposed to sunlight, begins a chemical reaction that helps neutralize air pollutants. The building itself is designed to leverage passive solar techniques. The south-eastern facing facade is entirely glass angled in a way to increase the intensity of sunlight on the building. The glass itself is dynamic, able to convert to frosted windows to provide shade during summer months. Photometers in the glass are triggered by an electrical current, making it more opaque. This can be controlled manually or autonomously to save on heating and cooling costs and energy usage.

A pneumatic tube waste disposal system runs throughout the building. Compost is collected in an odor and rodent proof basin beneath the building and its heat is captured for hot water.

The east side of the High Line will be public open space with green space, seating, play and education infrastructure.

Site Lines + the Hudson

It is important to maintain the site lines of the Hudson River for all. The view of the Hudson from the High Line helps convey the idea of connectivity of the city to nature and the river, as well as to the city’s history. The terrace of our building connects directly to the High Line and preserves the view of the Hudson, allowing visitors to feel like they are walking to the riverside. Crushed oyster shells make up the porous pavement to further emphasize the city’s reliance on the Hudson River.

Chelsea Food Co-op + Quarit

The Chelsea Food Co-op is a grocery store for local residents and the community to have access to locally grown produce and other goods, located on the west side of the building. Residents of the micro-unit apartments will have priority membership benefits to the Co-op, which includes discounts for locally grown produce and other goods for a one-time membership fee and designated work hours at the co-op. The cost of operation of the store will be kept to a minimum as a majority of the workers will be volunteer members, working on a monthly with commitments.

The results spaces will prioritize local businesses and start-ups and include a business incubator workshop.