Welcome To Resilient DenCity

Design Project Summary

Resilient DenCity is a prototype for dense urban waterfront development. The world is rapidly urbanizing, and the sea levels are rising. Urbanization increases the demand for urban land, especially in waterfront areas. But, sea level rise makes these areas less safe as they become increasingly flood prone. By building private space on the waterfront, cities can create projects that are financially feasible and also protect the existing city from flooding.

The design proposal synthesizes the 3 elements of the report, real estate, flood resilience, and urban design into an integrated vision for the Jersey City Waterfront. This design serves to treat private and public space as inter-related instead of just focusing on flood resiliency in the public realm.

The goals on the left strongly influenced by the research done for this project. Many elements of the design serve more than one goal. For instance, the green/blue network creates park spaces and collects rainwater during flash flood events. Also, the private real estate shapes and defines a network of pedestrian areas. By carefully weaving together the layers of the city a rich urban quality can emerge.

Hopefully this vision for the future waterfront can be an inspiration for what can be achieved when communities, companies, and citizens work together. This project would be one of the largest and most ambitious projects in the United States, and it would be difficult to see it through to completion. But, by overcoming the difficulties Jersey City has the ability to not only protect itself from flooding but create a rich new urban area, that will improve the quality and redefine the identity of Jersey City.

Sincerely,
Vincent Marchetto

Make no little plans...
-Daniel Burnham, 1907

FAR
Lot Coverage
Market Absorption Time
Total Housing Units
Total Commercial
Total Retail
Private NPV
Public NPV

6
38%
29 Years
20,520 Units
14.4 Million Sq Ft.
1.4 Million Sq. Ft.
$3.1 Billion @ year 40
$2.4 Billion @ year 30

Smart Block Density
Final Design Density
6. Public Spaces
A pedestrian street that serves as a retail network for the project connects Hoboken Station to Exchange Place station. Jersey City has a lack of pedestrian-only streets, and this street would add a new urban character to downtown Jersey City.

5. Density
The Density for this project is designed to maximize feasibility, and urban quality. There is higher density around an office hub to the South, a more low-rise neighborhood residential neighborhood in the middle of the project, and higher density to the North near the Hoboken Transportation Hub.

4. Automobile Circulation
Automobiles have limited access in the plan, just enough to allow access to parking garages underneath the buildings, as to preserve space for parks and pedestrian areas. Also, the network helps get rid of the dead ends that make vehicular mobility around the site cumbersome.

3. Green/Blue Network
A green/blue network through the plan helps store stormwater during heavy rainfalls and works to prevent Combined Sewer Overflows which are currently polluting the Hudson River. The network also provides a variety of recreational park space throughout the project.

2. Reclaimed Land + Dike
93ha of land is reclaimed behind a dike. The sale of the land pays for the dike. The dike completely protects all of downtown Jersey City from flooding.

1. Existing City
The existing waterfront of Jersey City is a decaying industrial landscape that does not serve the needs of a 21st century city. Ultimately, a new waterfront can enhance the city and keep it safe from flooding.
Urban Fragments

1. Newport Neighborhood
2. Harsimus Cove Neighborhood
3. Paulus Hook Neighborhood
4. Morris Canal Neighborhood
Exploded Axon
Scale 1:100

Parts List
1. Zinc Roof Cladding
2. Wood Roof Structure
3. Interior Finishes
4. Folding Walls
5. 2x4 Stud Wall
6. Teak Decking
7. 20 cm Concrete Slab
8. 20 cm EPS Foam Floatation
9. Mechanical Systems and Water Filtration