



01 City on the Loop

flood resisting solutions for Jamaica bay

Program: Infrastructure, Residential, Commercial
Location: Canarsie, Brooklyn, NY

Canarsie pier does not only call for barriers and protection; it also calls for design interventions that stem from a new visualization of the coast and coastal settlement. This project visualizes future settlement on the coast in a series of gradients between land and sea, structuring a loop along the coast that is diverse yet continuous. In the short term, the project solves housing problems caused by population growth. In the long term, it can become grounds for new settlement and ecologically sensitive infrastructure for coexistence of man and rising sea level.

The design is aiming to provide the community in Canarsie a long-term flood protection and a sustainable lifestyle with a profitable active urban edge. The project combines affordable housing, hotel, and commercial complex, and is divided to three phase that is profitable on its own. The first phase focuses on existing housing and Belt Park Way retrofitting; second phase and third phase would then provide job opportunities for local and a new tourist industry. The flood-resisting mega structure would eventually form an active waterfront for Jamaica Bay area



TRANSPORTATION



The belt parkway is a key link along the whole NYC, we design to activate the connection between canarsie area and the highway.

CONSTRUCTION



Along the belt parkway to build a primary berm as defense, at the entrance of two creeks, more plantation would be added as a secondary defence. Existing housing will be protected with water control system.

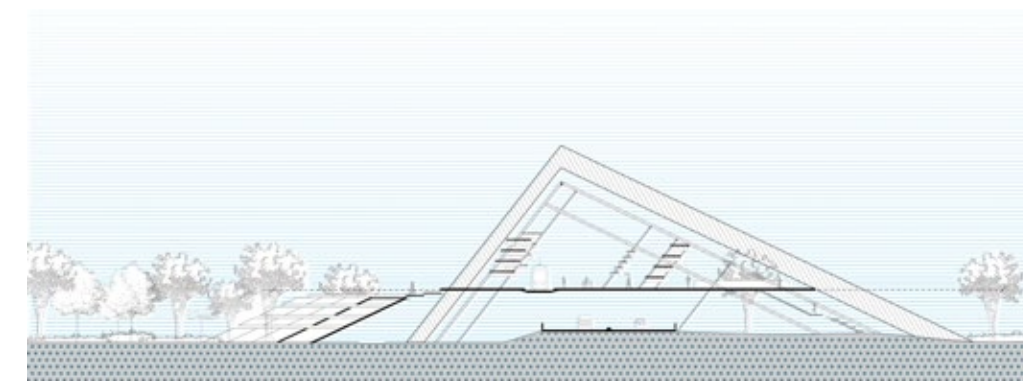
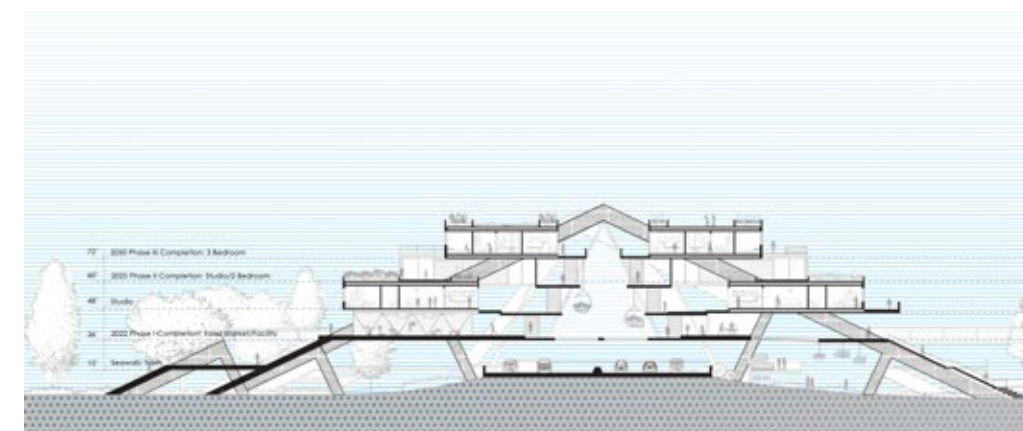
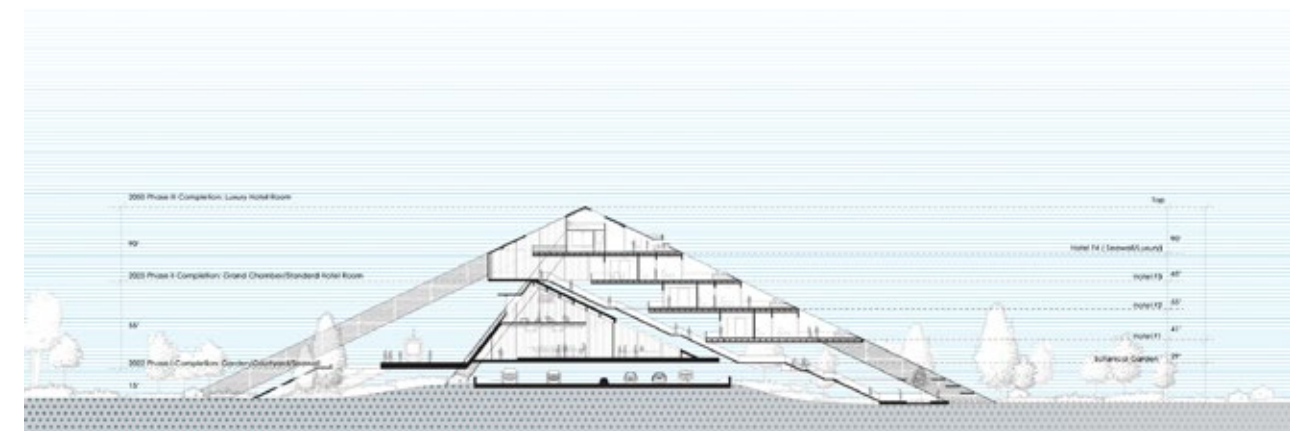
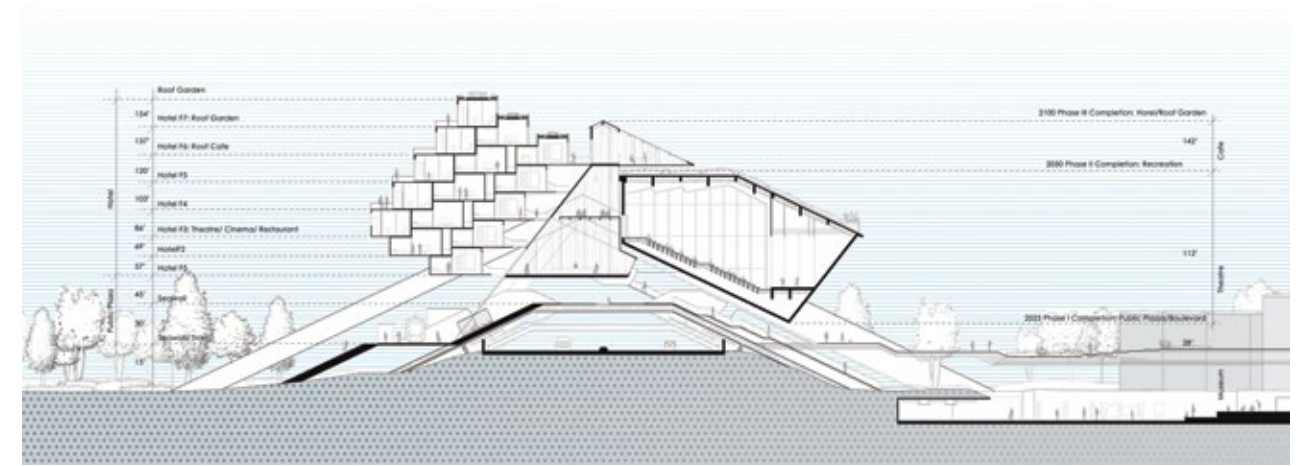
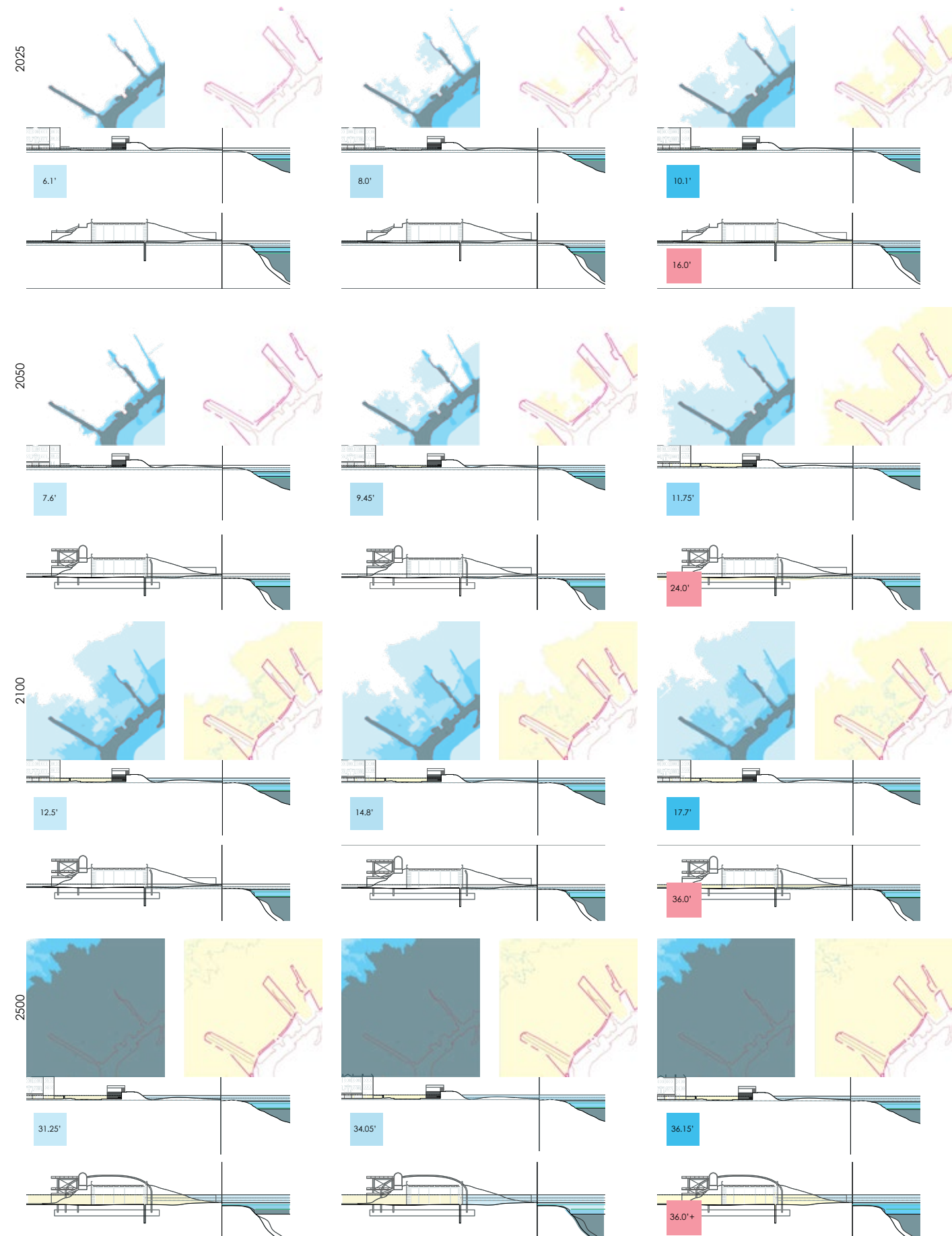
FLOOD LEVEL



Along the Canarsie pier and the two creeks is the most possibly flooded area, while the housing area is also in danger, our design strategy will be based on the degree of flood level.



100-Year Flood no Protection 100-Year Flood w Protection 500-Year Flood no Protection 500-Year Flood w Protection 2500-Year Flood no Protection 2500-Year Flood w Protection



LOOP PHASES

The project combines affordable housing, hotel, and commercial complex. It is divided into three phases that is profitable on their own.

The first phase focuses on existing housing and Belt Park Way retrofitting; second phase and third phase would then provide job opportunities for local and a new tourist industry. The flood-resisting mega structure would eventually form an active waterfront for Jamaica Bay area and a continuing tourist industry along the coast.



LIFE IN THE LOOP

The project proposes a new mode of coastal settlement, and a series of gradients between land and sea, structuring a loop along the coast that is diverse yet continuous. Living units, train connecting to JFK airport and various public spaces are provided within.

- Image1: hotel and tram phase
- Image2: community mall and public market
- Images3: new apartment
- Image4: the loop transportation system
- Image 5: vertical garden for the community

