

City of Boston Flood Resiliency Zoning Overlay District and Design Guidelines











GREENOVATE CITY # BOSTON

Barr Foundation

Green Ribbon

COASTAL RESILIENCE SOLUTIONS FOR SOUTH BOSTON

FINAL REPORT

B

- TIM

Mayor Martin J. Walsh

NAVOR HARTY 1. WALSH B 😝 COM CONTACT DECEMBER 1016

EXECUTIVE SUMMARY





BPDA Resiliency Checklist – Sea Level Rise Flood Hazard Map

boston planning &

development agency



boston planning & development agency

Somerville

dae

Zoning

Chelsea

Winthrop

Climate Ready Boston Coastal Resilient Solutions for East Boston 2016





Layered Protections







Zoning Scope

- Underlying zoning dimensional and use requirements and how these standards may need to be modified to address a design flood elevation based upon future sea level rise.
- Elevation transitions from public ways to new site and building conditions and the implications for zoning setback and site coverage.
- Floor Area Ratio modifications for new and existing buildings to address removal of occupied space in vulnerable areas to accommodate transitional structures such as stairs and ramps within a building.
- Potential for waterfront sub-districts to address flood pathways and district-scale coastal flood protection infrastructure.
 Building height and density as they relate to value capture.
- Higher level of building sustainability and LEED certification required within an Overlay.
- Updates to Article 80 and Planned Development Area policy and standards to better address resiliency.
- Address flexibility for updates based upon new climate science, data and modeling of sea level rise.

Guideline Scope

- Review resiliency design guidelines developed regionally and nationally.
- Identify primary building typologies within Boston's 40-inch Sea Level Rise Flood Hazard Area model.
- Develop building topology design guidelines and best management practices for building resiliency.
- Identify a methodology of how design performance standards can be integrated into retrofit projects, including historic buildings.
- Identify design measures necessary to transition from street and sidewalk elevations to higher building ground floor

elevation to encourage a quality streetscape and address accessibility challenges.

Initial Fact Finding

Identify requirements and conflicts - City Zoning



Flood Hazard District (Article



25)



Groundwater Conservation **Overlay District**



Initial Fact Finding

Identify requirements and conflicts - City Zoning



districts

V. Initial Fact Finding

Potential Building Typologies in the 2070 floodplain



Detached two-family (Dorchester)



General industrial (Dot Ave, South Boston)



Triple decker (East Boston)



Attached multi-family (South End)



Contemporary high-rises (Financial district, South Boston Waterfront)



Pre-war commercial / wharf buildings (South Boston Waterfront, Financial district, North End) NYC Planning – Coastal Climate Resiliency: Retrofitting Buildings for Flood Risk









City of Boston Flood Resiliency Zoning Overlay District and Design Guidelines

