

Coastal Flood Resilience Design Overlay District Frequently Asked Questions

The BPDA received many thoughtful questions regarding the draft Coastal Flood Resilience Zoning Overlay – Article 25A. Below are responses to questions and comments that were raised in several of the letters and emails received during the comment period.

Section 25A-3 Establishment of CFROD

Will there be a mechanism that will allow the boundaries of the Overlay District to be reviewed and modified as new information and projections are developed.

The Coastal Flood Hazard Map will be updated based upon coastal flood modeling updates developed by the state and evaluation by the City departments and agencies that administer climate resilience policy. Any updates to the overlay map will require at a minimum a public meeting, authorization from the BPDA Board and Zoning Commission approval at a public hearing.

Section 25A-3.3 Interpretation of Boundaries; Appeal

There should be mechanisms for maps amendments and revisions similar to FEMA’s map revision process.

The City’s Inspectional Services Department will evaluate questions regarding flood boundaries and site elevations for specific projects and parcels, consistent with Article 25, Flood Hazard Districts. FEMA map amendments are administered for purposes of the National Flood Insurance Program and relate to flood insurance policies.

There should be a clearly identifiable boundary map and source for flood elevations, and an online mapping tool, be made available for use by the public, ISD, and other City agencies.

A map of the overlay district will be adopted by Zoning Commission. The extents of the overlay and flood depths come from data provided by Woods Hole Group and the Boston Harbor Flood Risk Model (BH-FRM), which has been utilized by the state for flood modeling as well as for the Climate Ready Boston report. The overlay district, which is based upon the BH-FRM data, is available in the BPDA Zoning Viewer, as the Sea Level Rise – Base Flood Elevation layer. ISD will utilize this map layer for administering the overlay district.

Section 25A-4.1 Applicability

The BPDA should be applying applicability standards that capture smaller projects for resilience review.

The BPDA is using the same review thresholds that are established through Article 80 Large and Small project review at this time. In the development of the zoning recommendations it was determined that the existing review procedures under Article 80 are well defined, and provide an efficient and effective way to implement the goals of the Overlay, rather than developing new thresholds or conventions for review. The BPDA also lacks a regulatory mechanism to capture smaller projects for review. Due to the

complex and unique nature of building design in Boston's neighborhoods, and sensitivity to dimensional alterations and uses, the BPDA will be evaluating how to integrate resilience into neighborhood district zoning in the future.

Section 25A-4.1(c)(ii) Change in Use

Clarify how High Impact Subuse relates to High Risk Structures, and the definition of Institutional Use

Institutional Uses are defined under Article 2A, and each Institutional Use lists High Impact Subuses. High Risk Structures are defined by the MA State Building Code. Depending upon the use and structures, some High Impact Subuses could also be High Risk Structures.

Section 25A-4.2 Exempt Projects

Definition of Zoning Relief in Article 2A includes PDA Development Plans, but CFROD draft language limits exempt projects to those that secure relief from the Board of Appeal, however PDA Development Plans are approved by the Zoning Commission.

PDA and IMP projects do not need relief from the ZBA. They receive all zoning relief through PDA Review or IMP Review (Sections 80C-9 and 80D-11). Please note, the provisions under 25A 6-1(a) for Essential Facilities and High Risk Structures, and 25A 6-1(c) Conditional uses, which required allowed uses to become conditional have been removed, as these uses will be evaluated through the Resilience Review procedure under Article 80.

The draft language includes exemptions that are minimal, and do not cover projects that have already commenced or completed the Article 80 process but have either not yet sought relief from the Board of Appeal or do not need zoning relief.

The Exemption provisions under 25A 4-2 are consistent with Harborpark zoning (Section 42A-4) and remain as part of 25A.

Section 25A-5.3 Planned Development Areas & Institutional Master Plans

With respect to projects within the CFROD that are also within a PDA, the draft notes where conflicts exist between Article 25A and the PDA Plan, the more restrictive provisions shall govern. This introduces a problematic subjective standard to the analysis of zoning compliance.

The Inspectional Services Department will make determinations on what constitutes the more restrictive provision.

25A-6.1(a) Essential Facilities & High Risk Structures

Restrictions of Essential facility and High Risk Structure uses should be eliminated or made more targeted and definitions clarified.

The provisions under 25A 6-1(a) for Essential Facilities and High Risk Structures, which required allowed uses to become conditional have been removed, as these uses will be evaluated through the Resilience Review procedure under Article 80.

Section 25A-6.1(c)(i) Limitations on Use Below SLR-DFE – Allowed Uses

Section 25A-6(c) appears to convert subsurface parking accessory to residential use to a forbidden use, requiring subsurface residential parking to be above-ground, structured parking, which has historically been disfavored as an urban design matter and would severely reduce the amount of retail and residential space.

Flood prevention measures for sub-grade garages will be addressed through Resilience Review, and the use provision only allowing parking accessory to non-residential use has been removed from Article 25A. Article 25A does not supersede State Building Code and National Flood Insurance Program regulations regarding subgrade residential parking in FEMA Special Flood Hazard Areas.

Section 25A -6.1(c)(ii) Conditional Uses

This section of the draft CFROD provides that any non-residential use that is allowed or conditional in the underlying zoning is conditional below the required SLR-DFE. There is no guidance as to what would be required to secure a conditional use permit below the SLR-DFE for any particular use. In areas where there may be uses below the SLR-DFE that support watershed activation of Chapter 91 spaces, it would be useful to have guidance as to what might be allowable.

The provisions under 25A 6-1(c) Conditional uses, which required allowed uses to become conditional have been removed, as these uses will be evaluated through the Resilience Review procedure under Article 80.

Section 25A-6.2(a)(iii) - Lot Coverage; Required Open Space

BPDA should clarify whether these structures and areas are intended to be excluded from the calculation for required usable open space on a per dwelling unit basis, or if the language intends to allow these structures and areas to be omitted from any calculation applicable to required Lot Area Per Dwelling Unit, which in some cases is calculated relative to the square footage of the building footprint.

This provision of Article 25A allows areas used for vertical circulation and structures housing mechanical systems to be excluded from the measurement of required usable open space on a lot. Lot size will be determined in accordance with Article 14 and required open space for residences in accordance with Article 17.

Section 25A-7.4 (a-d) Resilient Design Principles

Individual development projects must support district-level resilience efforts and tie flood protection measures across multiple sites in order to protect critical infrastructure, support pedestrian connections, and enhance the character of the public realm.

Where projects are located in flood defense alignments as specified in Climate Ready Boston Coastal Resilient Solutions Reports, capacity to meet target flood elevations and tying into a preferred district scale solution or alignment will be part of the Resilience Review process.

Section 25A-7 4 (c) states that enhancements at an individual parcel or project level should not worsen risk at adjacent parcels or restrict implementation of larger coastal resilience plans for the CFROD. However, no clarity is provided about how to ensure a property is not worsening risk on adjacent parcels.

This Resilient Design Principle will be part of Resilience Review during the Article 80 process. Projects will be evaluated for potential to displace flood waters and/or increase erosion and scour on adjacent properties. Projects within Climate Ready Boston flood protection alignments will be evaluated for capacity to integrate into a preferred flood prevention design alignment and meet target flood elevations.

The Urban Design and Public Realm principle suggests that access to the public realm must be maintained during flood conditions – yet it is unclear if the assumption is that the public realm is also flooded or remains dry.

This principle notes that resilience measures should be designed to ensure individuals of all abilities can get in or out of an operable building during flood conditions.