



Technical Assistance Memorandum

Board of Zoning Adjustment (BZA) Applications 20768 and 20769 Flood Risk Analysis

June 17, 2024

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0. Executive Summary

The Office of Zoning (OZ) recently sent referrals to the District Homeland Security and Emergency Management Agency (HSEMA) for comments on two applications being reviewed by the Board of Zoning Adjustment (BZA); BZA Case 20768 and BZA Case 20789. The proposal for both cases is to build a single-family detached house located at 4337 and 4533 Douglas Street NE respectively.

1. Discussion

The HSEMA Hazard Mitigation Program provides technical assistance and outreach support to other District agencies to help them understand how natural hazard risk impacts their assets, plans, and programs. This assistance helps agencies identify effective mitigation actions and advance the planning for these projects to be ready for implementation. Technical assistance may include meeting to review available hazard mitigation resources, completing a risk assessment on a specific site, or conducting a benefit-cost analysis to determine the feasibility and effectiveness of a given project. Outreach support may include sharing insights gained from previous public engagements, organizing meetings to bring together many District stakeholders, or developing an outreach strategy to gain public feedback on a proposed project.

In addition to the above roles, HSEMA also serves as a primary point of contact with the Federal Emergency Management Agency (FEMA) in the determination of current and future hazard risks within the District. The role of HSEMA explicit to this request is unique in that HSEMA is largely responsible for stating the potential concerns of placing new structures either within or adjacent to the 100-year floodplain and noting the foreseeable concerns and impacts to the future residents of these homes. Given this position, HSEMA has no issue with the proposed use of the structures, but would encourage the applicant consider the below:

- Understand that these developments are putting the future homeowners at risk of higher flood insurance premiums given the shift by the FEMA National Flood Insurance Program to a graduated risk model;
- Engage the Department of Energy and Environment (DOEE) in all future development proposals in which flood plain regulations must be considered and discussed;
- Provide an effective evacuation plan for future homeowners and ensure a process is put in place for the socialization of this evacuation plan to all future homeowners;

Flood Insurance Premiums

As of April 1, 2023, FEMA has fully implemented the National Flood Insurance Program's (NFIP) pricing approach, Risk Rating 2.0. The approach leverages industry best practices and cutting-edge technology to enable FEMA to deliver rates that are actuarially sound, equitable, easier to understand and better reflect a property's flood risk. The NFIP's pricing approach is an actuarially sound approach to setting flood insurance premiums. The previous methodology set rates based on geographic zones and elevation. The NFIP's pricing approach now uses the best available flood risk data to set premiums based on each property's individual risk.

It looks at factors including:

- Likelihood of different types of flood perils (flash flooding, floods caused by waves or high-water levels, coastal erosion, and more)
- Characteristics of the building (foundation type, first floor elevation, etc.)
- Elevation and distance from flooding sources (coasts, rivers, lakes)
- Replacement cost value of the building (cost to rebuild after a disaster)



- Ways a building is adapted to withstand floods, such as flood vents
- Levee performance

Risk is dynamic. When it changes, premiums can change. Decisions that communities make about development and infrastructure can increase or reduce the flood risk throughout a community. Flood insurance exists to help support people after natural disasters. The National Flood Insurance Program is mandated by Congress to set rates that are actuarially sound to reflect each covered property's true flood risk and are fairly distributed based upon individual risk levels. The NFIP's pricing approach is part of an ongoing process to bring rates in line with risks. This should be noted in the decisions made to pursue this development as it is clear each of these properties are uniquely exposed to flood risk either by being directly placed in the 100-year floodplain or adjacent to the 100-year floodplain.

Engaging DOEE in Flood Plain Regulation Decision-Making

The implementation and enforcement of the District's floodplain regulations primarily fall under the purview of DOEE. As the designated Floodplain Administrator, DOEE is responsible for publishing regulations on how to safely develop in floodplains, and review all building permits in floodplains to ensure they meet the minimum floodplain standards. The process of getting a building permit and floodplain permit is separate from this BZA process and may require the applicants to provide additional information and drawings for DOEE to review. Therefore, as these developments continue throughout the building permitting process, the development team in question should continue to engage DOEE to ensure the developments are appropriately designed for their existing flood risk.

Ensuring Verbalization of Evacuation Plan

The mission of the HSEMA is to support and coordinate homeland security and emergency management efforts, ensuring that the District's all-hazards emergency operations are prepared to protect against, plan for, respond to, and recover from natural and man-made hazards. Per the Section 3104.7 of the Title 20 DCMR Chapter 31 - Flood Hazard Rules, the applicant may be required to consult with DOEE and HSEMA if deemed necessary and develop an evacuation plan to ensure that it does not conflict with other emergency plans prepared for the area under consideration as a building site. Should an evacuation plan be developed, it is encouraged that there is language included surrounding the verbalization of this plan to future homeowners to ensure a comprehensive knowledge of the needed safety precautions in an emergency scenario.

