



Flood Mitigation Requirements Explained

Purpose of Flood Mitigation Standards

Primary Town-wide Protection: The Town of High River and its partners have invested \$200 million in flood mitigation and protection for the community. This includes constructing permanent and interim dikes throughout town and returning two neighbourhoods to an undeveloped state to allow more room for the Highwood River to flow. While it is not possible for the Town to prepare for all possible future disasters, the permanent dikes have been built to protect against the river flows experienced during the 2013 flood (the Designated Design Event that exceeded the 1:100 year flood level), plus one additional vertical metre of protection. Dikes are regularly inspected and maintained as part of the Town's annual flood mitigation program.

Secondary Building Site Protection: In addition to the Town's dike system, it is also important for developers, home builders and residents to do what they can to mitigate damage to their individual properties from possible flooding or other water incidents, which is why Minimum Development Elevation (MDE) standards were added to the new Town of High River Land Use Bylaw. The Minimum Development Elevations are based on the 1:100 year flood level and considers water damage to properties that can be caused by a variety of factors other than overland flooding, such as heavy rains or failure of a storm or sewer outfall. By applying these standards buildings are more likely to remain functional during and immediately after a high water event.

When is Flood Mitigation Required for Buildings?

The Land Use Bylaw outlines the development requirements to meet the Town's flood mitigation standards. The diagrams on the following pages demonstrate the two flood mitigation development scenarios that exist within the Town:

1. Construction protected behind the dike system; and
2. Construction on lands that are not protected by the dike system, which are identified on Map 2 of the Land Use Bylaw as "Restricted Development Areas".

The majority of development in Town will fall under Scenario 1, meaning that the land is already protected to the Designated Design Event (2013 flood levels), plus an extra vertical meter, but this does not mean the building will be fully above the required Minimum Development Elevation, which is shown on Map 3 of the Land Use Bylaw.

How do I determine the Minimum Development Elevation, plus 0.5 metres standard for my property?

Generally, properties north of High Park Blvd, and parcels east of 5th Street SE and north of 12th Avenue SE do not require mitigation because even the basements *should* be a minimum of 0.5 metres above the Minimum Development Elevation. To be sure, you may request the mitigation elevation for your property by emailing planning@highriver.ca and include your name, the address of the property, and your intended development plans. Planning will review the request and Engineering will extrapolate the Minimum Development Elevation for you using Map 3 from the Land Use Bylaw. Your Land Surveyor, Architect or Engineer can then create a grading plan and design the building accordingly.

Are there exceptions to the standards?

In the case of retrofits, alterations, or additions to existing buildings, or infills in established areas of Town, variances to the mitigation requirements may be granted at the discretion of the Development Authority. Considerations to approve a variance include, but are not limited to, the impact to the streetscape, accessibility, and limitations of the existing floor plan. Essentially to be granted a variance, applicants must demonstrate that compliance with the standards would negatively impact the public realm or function of the building. Construction in Montrose, Highwood Ranch and any other greenfield area will not be granted variances.

Construction behind a dike

The following diagram and table identify how the Development Authority assess the need for flood mitigation in protected areas of Town:

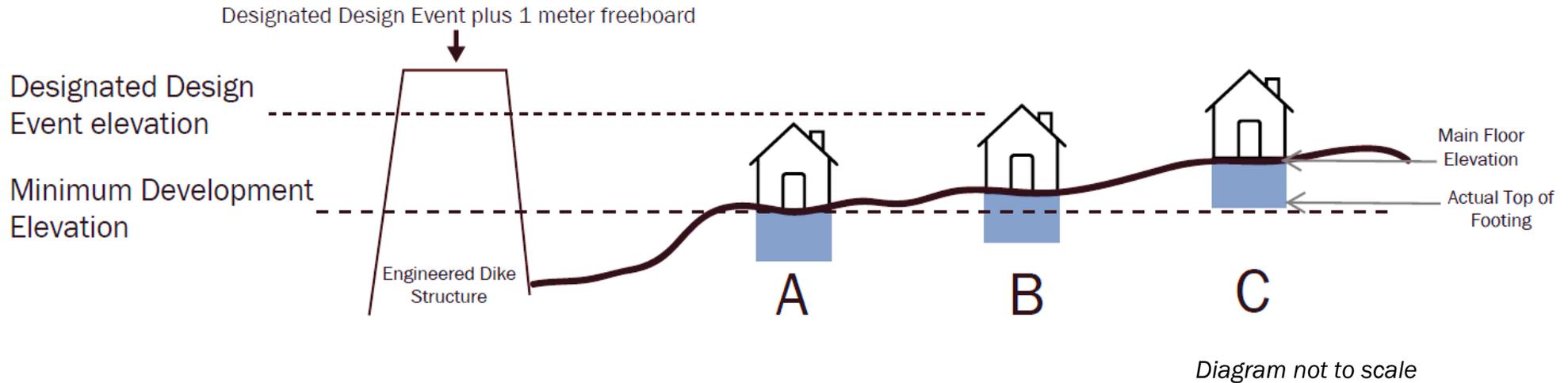


Table 1: How is it determined if mitigation and a Flood Compliance Inspection Report will be required?

	Home A	Home B	Home C
Main floor is a min. 0.5 m above MDE?	X	✓	✓
Actual Top of Footing is a min. 0.5 m above MDE?	X	X	✓
Flood Compliance Inspection Required?	yes	yes	no

If your building is represented by Home A or B above, it will be a condition of your Development Permit to submit a completed *Flood Protection Compliance Inspection Report*, prior to being granted building occupancy. Among other items, the report will confirm that the following are a minimum of 0.5 metres above the Minimum Development Elevation for your property:

- Main Floor Elevation
- Bottom of hot water tank
- Bottom of furnace
- Bottom of electrical panel and water meter

New construction in Restricted Development Area

The following diagram demonstrates how the land and building in a Restricted Development Area could be infilled to meet the flood mitigation requirements of the Land Use Bylaw.

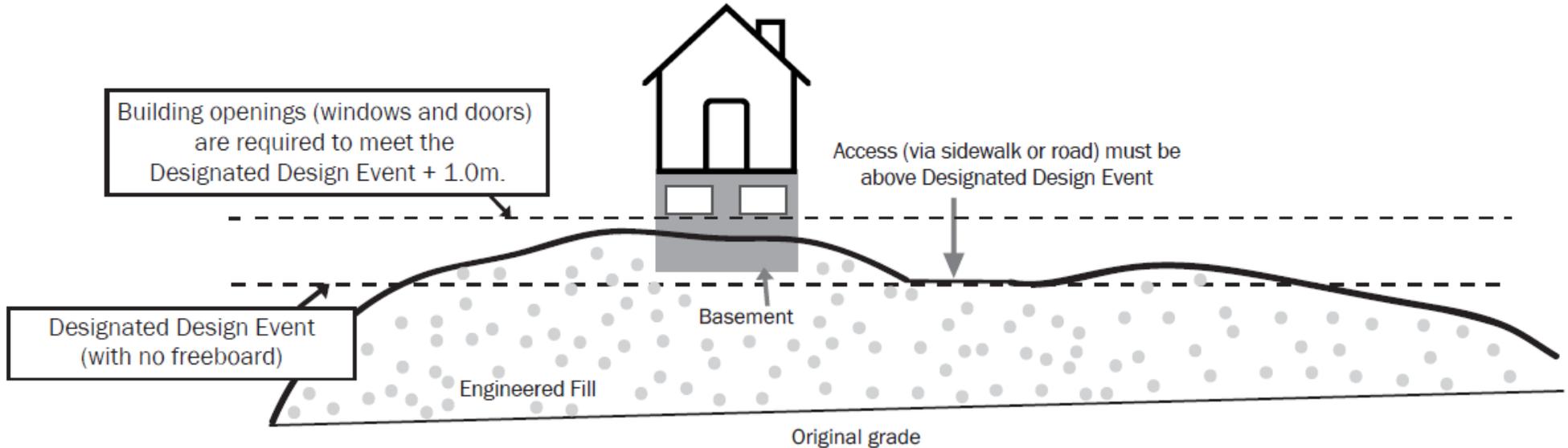


Diagram not to scale