To: Planning Board
From: CDD Staff
Date: August 28, 2013
Re: Craig Kelley Zoning Petition (Stormwater Separation)

In response to the Planning Board’s discussion at the June 18 meeting, we have prepared information on the following topics:

- The range of properties affected by the proposed zoning
- Possible alternatives to increased FAR and height as an incentive to eliminate central drain lines

**Affected Properties**

The properties that might take advantage of the proposed zoning include existing buildings with flat roofs and drain pipes that collect water runoff from the roof and discharge it directly into the City sewer line.

Data sources maintained by the City with information on existing buildings are not detailed enough to make an accurate accounting of the number of buildings that fall into these categories. In the memo to the Planning Board dated June 18, 2013, the Department of Public Works (DPW) provided some analysis of a small area in the vicinity of Concord and Huron Avenues that was performed as part of the City’s Alewife Sewer Separation Program. DPW inspected 690 properties in the area and found 67 residential buildings (approximately 10% of the total) with flat roofs and internal drain systems connecting to the City sewer.

There are approximately 11,000 residential buildings across all of Cambridge. If the overall building stock is assumed to be comparable in its mix of building types, the number of buildings with flat roofs and direct drain connections would be approximately 1,000.

However, briefly scanning an aerial view of Cambridge reveals that the Concord/Huron area has a smaller proportion of flat-roofed buildings than neighborhoods in the eastern portion of the city, such as East Cambridge and Cambridgeport. While there are some neighborhoods that have a similar building stock to the Concord/Huron area, there are others where the proportion of flat-roofed buildings is likely around half or more.

Therefore, the actual number of affected properties throughout the city is likely to be greater than 1,000, possibly numbering between 2,000 and 3,000.
Alternative Incentives

Allowing an increase in allowed height and floor area to build an additional story on existing residential buildings would be a substantial benefit to property owners. The cost and disruption that would be required to modify an existing drain line would also be substantial, but many property owners may be enticed to make those improvements given the increase in value that would result. However, as the Planning Board noted in its discussion, allowing ten-foot increases in height would potentially have negative impacts not just on abutters, but on the character of entire neighborhoods where there is currently a uniform prevailing height.

One possibility that was raised is the allowance of usable decks or green spaces on rooftops. Such spaces are currently allowed under zoning. However, usable open spaces that are located above the second floor of buildings are counted as Gross Floor Area (GFA) on the lot, and therefore owners typically do not provide such spaces in favor of maximizing the GFA provided within the building. Also, roof decks usually require a stairway and headhouse for users to access them, which are not exempt from height limitations and therefore can be an impediment to building a roof deck. In situations where owners have sought zoning relief to build roof decks, neighbors have often opposed the request because of concerns about noise and privacy impacts.

Aside from relief on height, floor area or rooftop open space, it is difficult to conceive of a zoning incentive that would be appropriate to the type of modification that is desired. Possibly, a few feet of additional height could be granted to facilitate the improvement of roof drainage systems while providing more spacious top floors and possibilities for skylighting without having to seek a variance. This would provide some modest benefit to property owners while minimizing potential impacts on direct neighbors and avoiding the overall impacts of increased floor area within neighborhoods. However, it is possible that the increased value of additional height without additional floor area would not be sufficient to offset the cost of the improvements.