

30 September 2021

Cambridge Planning Board 344 Broadway Cambridge MA 02139

Re: PB Case No. 369; 600 Mass Ave

Memo Regarding Construction Over the Existing Tenant Spaces

From: Peter Quinn AIA Architect of Record

We are providing this memo in response to questions raised by Planning Board members for the 600 Mass Ave project. The particular focus of these questions was the potential for a buildout over, or in place of, the existing Chipotle and Supreme Liquor tenants. Attorney Crane has already discussed the insurmountable issues with vacating those tenants to build from the ground up. We will focus on the construction over the tenants, the zoning limitations, and some contextual observations.

## 1. Construction Over the Existing Tenants

Building over the tenants is a difficult set of problems, notwithstanding the existing historic façade discussed in the 9/29/21 Memo from Charles Sullivan. The existing building in the subject area is constructed of simple wood frame and masonry construction, and is single story over a mass stone foundation. It was never designed for a vertical addition. Therefore, any kind of vertical addition that preserves these tenant spaces will require the installation of a new superstructure that would reach down through the tenant spaces into large footings in the basement. This solution would envision an independent structural frame capable of withstanding seismic and gravity loads. The most likely method would be to install a grid of "super columns" which would allow the addition to float above the existing building without subjecting any new loads on the existing ground floor. The steel columns would typically be in the two- to three-foot diameter range and would be very expensive to fabricate and install. Once a platform above the existing tenants was established, more conventional construction could be undertaken.

Although the existing tenants could theoretically remain in the scenario described, the disruption and loss of usable space due to the new columns would be very adverse. If structural cross-bracing were required, then additional tenant space would be lost, effectively defeating the purpose of the system.

In any case, with such an expensive system one would expect that cost would be reciprocated with a very substantial buildout. We estimated that the practical maximum footprint of such an addition would be no more than 3- to 4,000-SF per floor, which could not possibly justify the imposed structural costs.

## 2. Limitations of Zoning FAR

It has been mentioned that the allowable building area (i.e., the FAR) provided in the zoning Overlay presents some issues as it relates to building over the tenant spaces. While there is some FAR available to allow perhaps one to two stories above the tenant space, it is not enough to fill the space entirely to the same six-story height as in the proposed building. Certainly, in consideration of the aforementioned costs involved to support the structure above the tenant spaces, a full height building would be mandatory. However, as noted in the hearings, the project was intentionally designed to not exceed the 90% threshold of maximum development of the site so as to not trigger the payment-in-lieu-of-parking requirement. To exceed that 90% threshold requiring the payment would make the overall development economically implausible. The additional costs placed on the development could not reckon with other cost already anticipated, such as the affordable housing requirements, the provision of extensive retail and commercial space, and preserving the Bakery Building.

In order to have a legal basis for full height construction above the tenant spaces would necessitate that the zoning be changed to allow more FAR. This would certainly be a time-consuming process with unpredictable results. Alternatively, the owner could seek a variance for the additional FAR. Since a hardship is obviously not present, a variance is out of the question.

## 3. Context and Building Height

We also wish to address the question of whether or not filling over the Chipotle and Supreme Liquor tenants creates an odd juxtaposition of building height, as suggested in the Planning Board Hearings.

We surveyed the existing conditions along Mass Ave and found that they were at least six examples of the taller buildings next two one- or two-story buildings with similar or greater offsets. In fact, these juxtapositions are quite common, as the attached photo study shows. To this one must add that there are extensive one-story sections of Mass Ave in the same proximity to the site.

From an urban design perspective, we believe one would consider this variation to be the normal fabric of the Square and slow recording of changes that comes with time. To wit, we believe this space in question at 600 will eventually be filled in as will many others in the Central Square area – but over time.

Attached: Building Height Study – Central Square

## BUILDING HEIGHT CONTEXT NEAR 600 MASS AVE









600 Mass Ave.

Planning Board Continued Hearing

10/05/2021







