8 December 2025

Katherine F. Watkins, P.E.
Deputy City Manager
City of Cambridge
795 Massachusetts Avenue
Cambridge, MA 02139

Project 200609.04 – Binocular Survey of Exterior Conditions, Riverview Condominiums, 221 Mt. Auburn Street, Cambridge, MA

Dear Ms. Watkins:

At your request, we performed a binocular survey of the exterior conditions at Column Line E (north elevation) of the Riverview Condominiums (Riverview) structure at 221 Mt. Auburn Street. This letter summarizes our findings.

1. BACKGROUND

The City of Cambridge (City) and Riverview Board of Trustees (Riverview) are currently planning the controlled demolition of the Riverview structure. The City and Riverview requested that Simpson Gumpertz & Heger Inc. (SGH) monitor the building via drone survey every two weeks beginning in July 2025 to identify potential changes in the structure that may warrant immediate intervention. The drone survey images typically take two weeks to review. With demolition projected to start within the next two weeks, we conducted our most recent survey using binoculars in lieu of a drone survey. Our observations are limited to the readily visible exterior portions of the structure since interior structural conditions are concealed by finishes and due to access restrictions in the building. Exterior drone and binocular observations are efficient methods to document potential structural changes, but they are limited to only a small portion of the structure and will not identify potential structural changes within the building.

2. OBSERVATIONS

Miranda K. Tan and Aidan R. Lutz of SGH visited the site on 3 December 2025 to conduct a binocular survey. We compared photos from the ground and binocular observations of the north elevation to those from our November 2025 drone surveys to identify changes. We did not note substantial changes between our previous November 2025 surveys and December 2025 binocular survey. In general, we noted the following conditions:

- Typical distress is consistent with previous surveys and includes slab topside, edge, underside, and diagonal cracks visible through the coating. We did not note any new locations with potential cracks that were not present in our prior surveys.

- There are spalls and incipient spalls on the slab edge. We did not note any new locations with incipient spalls since November 2025.
- We continue to monitor cracks throughout the north elevation of the building for signs of lengthening and widening. We did not note any locations where existing cracks appeared to have lengthened or widened relative to our November 2025 surveys.

3. DISCUSSION

The objective of our drone and binocular surveys is to identify potential changes in the readily visible exterior Riverview structure to determine if intervention is warranted between now and the upcoming demolition. Drone and binocular observations allow us to perform close-up observations of the north face of the structure where the concrete slab is exposed, without entering the building. Since our first drone survey of the north elevation in June 2024, we have observed some of these cracks widening and lengthening. In addition to structural distress, changes that we documented may be due to one or more factors, including, but not limited to:

- Thermal cycles.
- Lighting, shadows, and moisture, emphasizing crack extents.
- Relative distance and angle of the drone to the observation location.
- Aging or weathering of the architectural coating.

With demolition projected to start within the next week, we have completed our biweekly monitoring of the structure. If the start of demolition is delayed, we will work with you to schedule another survey. If needed, we will use the results from our prior surveys to monitor critical areas and provide you with an update regarding any changes to the building.

Sincerely yours,

John M. Porter, P.E.
Senior Principal
MA License No. 45684

Linda M. Seymour, Ph.D.
Project Consultant

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